IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS

CONNECTU, INC., CAMERON WINKLEVOSS, TYLER WINKLEVOSS and DIVYA NARENDRA,

Plaintiffs,

vs.

No. 1:07-CV-10593-DPW USDS District of Massachusetts

FACEBOOK, INC., MARK
ZUCKERBERG, EDUARDO SAVERIN,
DUSTIN MOSKOVITZ, ANDREW
MCCOLLUM AND THE FACEBOOK, LLC,

Defendants.

CONFIDENTIAL - ATTORNEY'S EYES ONLY DEPOSITION OF AARON GREENSPAN Thursday, November 29, 2007

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Deposition of AARON GREENSPAN, taken on behalf of the Defendant, at Orrick, Herrington & Sutcliffe, LLP, 1000 Marsh Road, Menlo Park, California, 94306, beginning at 9:12 A.M. on Thursday, November 29, 2007, before JANIS L. JENNINGS, Certified Shorthand Reporter No. 3942, CRP

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Also Present: Peter Hibdon, Videographer

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MENLO PARK, CALIFORNIA; THURSDAY, NOVEMBER 29, 2007; 9:12 A.M.

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THE VIDEOGRAPHER: Good morning. Here begins the videotaped deposition of Aaron Greenspan, tape 1, Volume I, in the matter of ConnectU versus Facebook, in the United States District Court, District of Massachusetts. The case number is 1:07-CV-10593-DPW.

Today's date is November 29th, 2007, and the time is 9:12.

The video operator is Peter Hibdon representing LiveNote World Service, 221 Main Street, Suite 1250, San Francisco, California.

The court reporter is Janis Jennings of Sheila Chase reporting on behalf of LiveNote World Service.

Today's deposition is taking place at 1000 Marsh Road, Menlo Park, California.

 $\label{thm:counselplease} \mbox{Would counsel please identify themselves} \\ \mbox{and state whom they represent.}$

MR. COOPER: Monty Cooper representing all defendants, except Eduardo Saverin, with the Law Firm of Orrick, Herrington & Sutcliffe. With me is Theresa Sutton also of Orrick, Herrington & Sutcliffe.

MR. SHAFROTH: Nathan Shafroth from Heller Ehrman, LLP, representing Eduardo Saverin.

MR. WALLERSTEIN: Tom Wallerstein with Quinn, Emanuel, Urquhart, Oliver & Hedges representing the plaintiffs.

MR. FURBUSH: David Furbush representing the witness.

THE VIDEOGRAPHER: Thank you.

 $\label{eq:william} \text{Will the court reporter please swear in the witness.}$

AARON GREENSPAN,

The deponent herein, was sworn and testified as follows:

EXAMINATION

BY MR. COOPER:

Q. Mr. Greenspan, good morning. I'm Monte Cooper. I represent all defendants except Eduardo Saverin in this matter.

Have you ever had your deposition taken before?

- A. Yes.
- Q. All right. How many times?
- A. Total? One.
- Q. Okay. I presume then that you know some

of the basic rules. I just want to repeat them so that we're all on the same page.

First of all, always try and answer yes or no as opposed to uh-huh or huh-huh or something that gives an indirect reference if it's in a written transcript.

The second thing is I would ask as a courtesy to your own attorney that you take a moment after every question in case he has an objection or in case counsel for the plaintiffs might have an objection. They are allowed to interpose it, but unless your attorney instructs you otherwise, you must go ahead and answer the question to the best of your ability.

Do you understand that?

- A. Yes.
- Q. All right. Also you are -- it's at your convenience today so I don't want you to feel uncomfortable. If you need to take a bathroom break or if you have some reason you need to take a break, feel free to let us know and we'll accommodate.

It is our expectation, or my expectation, that I should be able to get you out of here at a relatively decent time, and I do not expect that this deposition will last any greater length than necessary and hopefully it will not disrupt your day too badly.

Having said that, are you on any type of medication or is there any disability today that would prevent you from answering any questions truthfully?

- A. No.
- Q. Okay. Mr. Greenspan, can you just tell us first of all where you live.
 - A. I live in Palo Alto.
 - Q. All right. Palo Alto, California?
 - A. Yes.
- Q. All right. You understand that you're being videotaped today?
 - A. I do.
- Q. All right. And you understand that the testimony you give, both in written form and perhaps in video form, can later be shown and repeated back to a court of law, including to any trial of this matter?
 - A. I do.
- Q. All right. So you understand the obligations of truthfulness and candor, I assume?
 - A. Yes.
- Q. All right. Did you prepare for today's deposition?
 - A. I did.
- Q. All right. Did you meet with counsel prior to today's deposition?
 - A. Yes.
- Q. All right. Did you meet with anybody else prior to today's deposition?
 - A. Regarding this deposition?
 - Q. Yes. Yes. I'm sorry.
 - A. No.
- Q. Okay. Just at a high level, do you have any sense of how long you prepared for today's deposition?
 - A. A few hours.
 - Q. Okay. Was that yesterday or --
 - A. Some of those hours were yesterday.

- Q. But it was over a period of time?
- A. Much of what I will tell you has been, you know, acquired by me over a long period of time so...
- Q. I understand that. Let me just rephrase.
 I just want to say: You prepared for a
 couple of hours yesterday and maybe some other
 time, but in the aggregate, just a couple hours

for today's deposition. That's all.

- A. Correct.
- Q. Okay. How long have you resided in Palo Alto?
 - A. Since July of 2006.
- Q. All right. Did you reside anywhere else? Or where did you reside prior to Palo Alto?
- A. Actually, I was in Atherton for two months and then Mountain View and then Palo Alto. So I've been in California since July of 2006, and I lived in Texas before that.
 - Q. Okay. And how long did you live in Texas?
 - A. About one year.
- Q. All right. Let me step back. Can you just give me an overview of your education.
- A. I went to Harvard College for $\ensuremath{\mathsf{my}}$ undergraduate education.
- Q. All right. And when did you go to Harvard College?
 - A. From September of 2001 until June of 2004.
- $\ensuremath{\mathtt{Q}}.$ Did you graduate early? Let me strike that.
 - Did you graduate from Harvard?
 - A. Yes.
- Q. All right. So if you graduated in June 2004, did you graduate in three years?
 - A. Yes.
 - Q. All right. Where did you grow up?
 - A. I grew up in Cleveland, Ohio.
 - Q. Okay. What was your major at Harvard?
 - A. Economics.
 - Q. I'm sorry?
 - A. Economics.
- Q. All right. Did you have any computer science courses while you were at Harvard?
 - A. Yes.
 - Q. How many?
 - A. One course and one independent study.
 - Q. All right. What was the one course in?
 - A. It was called "Computer Science 50."
- Q. Okay. That's an introductory computer science course?
 - A. Yes.
- Q. All right. Do you have any programming skills? Computer programming skills?
 - A. I suppose you can say that I do.
- Q. All right. Have you ever coded in C++, for instance?
 - A. Yes.
- $\ensuremath{\mathtt{Q}}.$ All right. What computer languages have you coded in?
- A. Basic, PASCAL, C, C++, SQL, Axcess Basic, Visual Basic, PHP, CSS, JavaScript, HTML, and probably others.
 - Q. Okay. You mentioned SQL.
 - A. Yes.
 - Q. How proficient are you in SQL?
 - A. Very.

- Q. All right. Did you program in SQL before you went to Harvard?
 - A. Yes.
- Q. And for how long did you program in SQL before you went to Harvard?
 - A. I believe two years.
 - Q. Okay. You mentioned PHP.
 - A. Yes.
- Q. All right. Did you program in PHP before you went to Harvard?
 - A. Yes.
- Q. In fact, PHP often works together with SQL; correct?
 - A. It can.
- Q. All right. How proficient do you consider yourself to be in programming PHP?
 - A. Very.
 - Q. Okay. You mentioned HTML.
 - A. Yes.
- Q. All right. Did you program in HTML before you went to Harvard?
 - A. Yes.
- Q. All right. How proficient do you consider yourself to be in programming HTML?
 - A. Very in HTML.
 - Q. All right. You also mentioned JavaScript.
 - A. Yes.
- Q. All right. Did you program in JavaScript before you went to Harvard?
 - A. Yes.
- Q. All right. How proficient would you consider yourself to be in programming in JavaScript?
 - A. Moderate to very.
- Q. All right. While you were at Harvard, did you program any -- strike.

When you say you are very proficient in programming in SQL, can you give me an overview of some of the types of projects you've done in programming in SQL?

- A. It's difficult to do a project in SQL alone.
 - Q. Okay.
- A. However, I've used SQL in conjunction with a range of projects from projects that I've been paid for through my company to projects I did while I was at school.
- Q. Are you familiar with the programming language called PERL?
 - A. Yes.
 - Q. Are you able to program in PERL?
 - A. To a limited extent, yes.
- Q. Now, you say you're familiar with PHP, HTML, SQL, JavaScript and the like; correct?
 - A. Yes.
- Q. All right. Would you agree with me that those particular programs are frequently used in what is known as "web design"?
 - A. They are used in web-based development.
- Q. Okay. And what do you consider web-based development to be?
- A. In contrast to web design, which I consider the graphic design of websites, I consider web-based development to be the development of computer code that allows web pages to be constructed in a specific manner, which may be

or may not be dependent upon the graphic design.

- Q. Okay. Now, when you say that you consider web-based development separate from web-based design and it's because of the graphics, are you talking about the user interface?
 - A. In part.
- Q. And also the applications that can be presented, for instance, by a browser?
 - A. I'm not sure I understand the question.
- Q. Have you ever heard the term "front end" --
 - A. Yes.
 - Q. -- in terms of computer science?
 You have?
 - A. Yes.
- Q. All right. Do you consider yourself -- okay.

What do you understand the expression "front end" to refer to?

- A. This is actually a controversial topic, but my understanding is the graphic design and user interface of a website.
- Q. All right. Now, the programs that you reflected that you have a capacity of programming in are frequently used for front end design or front end development; correct?
- A. The programming languages that I listed previously would be considered used for back end development.
- Q. Okay. SQL -- all right. Strike that. What do you consider back end development to be?
- A. I consider back end development to be related to the database structure of a website and the logic flow of the website itself.
- Q. All right. And the database structure of a website, is that often called "schema"?
- A. Schema is a word that can be used to refer to the database structure.
- Q. All right. Do you consider yourself primarily fluent in back end design then?
 - A. No.
- Q. All right. In the context of front end design, what programs do you typically use?
- A. Adobe PhotoShop, Adobe Illustrator, Adobe In-Design, Macromedia Flash, Adobe Streamline and various other graphic design tools.
- Q. Okay. Would that include, for instance, Microsoft Visual?
- A. No. Microsoft Visual Studio is typically not used in PHP and is used to construct web-based -- or, I'm sorry -- Windows-based applications.
- Q. All right. Do you do any Windows-based development?
 - A. Not presently.
- Q. Now, you mentioned, for instance, types of applications like Flash are what you used for front end design?
 - A. Not exclusively.
- Q. Well, Adobe Flash and several others that you listed; correct?
 - A. Yes.
- Q. And that's to design an interface that is presented by a web browser, for instance, to a user that views the site; correct?

- Yes. That is primarily what the front end is for.
- All right. And do you consider yourself Q. proficient in front end design in those types of applications?
 - Α. Yes.
- Q. Okay. And then in terms of back end design, you referred to it primarily as SQL, HTML, PHP and the like; correct?
 - A. Correct.
- And you also consider yourself proficient Ο. in back end design; correct?
 - A. Yes.
- All right. How long have you been Q. programming front end-type web development applications?
 - A. Since 1996.
 - All right. So prior to Harvard? Q.
 - Yes. Α.
- Q. All right. And does that continue through the present day?
 - A. Yes.
- Q. All right. How long have you been developing back end applications?
- A. I've been developing databases since 1995 and web-based applications since 2001.
- Q. Okay. And is that continuing through the present?
 - Α.
- All right. When you say you developed Q. back end data -- that you developed a database, does that include the database that's populated, for instance, by the information generated by SQL?
- A. To my knowledge, almost every relational database in use since the early 1990s populates its data with SQL.
- Q. Okay. But you do understand what I'm referring to in terms of what "populating a database" means; correct?
- A. My understanding of populating a database is inserting information into the database.
- Q. All right. That typically occurs on a -that can frequently occur on a type of a computer called a "server"; correct?
 - A. Among others.
- All right. When you were at Harvard, were Q. you doing any front end design for any type of web development project?
 - A. Yes.
 - Q. All right. Can you list those projects.
- A. Let's see, are you interested in projects that I worked on for my company? For Harvard itself? For my own amusement? Or all of the above?
- Q. Well, let's break them out. And before we go into it, you say "my company" in that last answer. What company are you referring to?
 - Think Computer Corporation. Α.
- All right. And what is -- is Think Computer Corporation a company that was created by you while you were at Harvard or sometime before?
- A. I incorporated the company in 1998.
 Q. So you incorporated it three years before you -- three years before you entered Harvard?
 - A. A little bit more than three years, yes.
 - Okay. Where did you incorporate? Q.
 - Ohio. Α.

- Q. All right. Did you have a position with Think Computer Corporation?
 - A. President and CEO.
- Q. All right. Were there any other officers of the company prior to your entering Harvard?
- A. Neil Greenspan is the vice president and I believe the secretary.
- $\ensuremath{\mathtt{Q}}.$ Okay. Neil Greenspan, is he related to you?
 - A. Yes.
 - Q. Is he your brother?
 - A. No.
 - Q. Is he your father?
 - A. Yes.
- Q. Okay. Did you have any other company that you started prior to entering Harvard?
 - A. Yes.
 - Q. And what was that?
 - A. Think Computer Foundation.
- Q. First of all, what type of company was Think Computer Corporation?
- A. At the time I incorporated it, it primarily focused on computer services such as IT consulting and computer repair.
 - Q. And "IT" is Information Technologies?
 - A. Yes.
 - Q. Was it a for-profit company?
- A. Think Computer Corporation was and is a for-profit company.
- $\ensuremath{\mathtt{Q}}.$ Okay. And you still ran it even when you were at Harvard?
 - A. Yes.
 - Q. All three years you were at Harvard?
 - A. Yes.
- Q. All right. Other than you and your father, did anyone else assist in the running of the corporation while you were at Harvard?
 - A. No.
- $\,$ Q. You said it initially was involved with IT and computer services; correct?
 - A. Correct.
 - Q. Did it evolve into something else?
 - A. Yes.
- Q. All right. Can you give me the evolutionary history of Think Corporation.
- A. In 2001 I decided to focus on computer software development and web-based software development instead of on computer services.
- Q. And by "web-based development," does that mean web design?
 - A. It includes web design.
- Q. All right. Can you just give me some overview of some types of projects you did in web-based design or web-based development while you were with Think Corporation while at Harvard.
- A. I created a database and website for the Harvard University Psychology Department, a prosopagnosia research project, which is a face blindness disorder where you cannot recognize people's faces. And that website was called faceblind.org, and I designed everything related to that website.

I did do other projects for clients I had had prior to Harvard, including I believe a company called Worldview Technologies in New York. And at this point I cannot remember a whole lot of what I

was working on for Think in 2001, but I had a number of clients who I would do work for regularly.

- Q. Okay. Did Think Corporation do any work for any other Harvard department other than the psychology department?
- A. During my time at Harvard, no. But since then, yes.
- Q. Okay. During the time you were at Harvard, what -- you said that you also did front end design for Harvard separate from Think Corporation when you were listing earlier.

Do you recall saying that?

- A. Yes.
- Q. All right. What did you have in mind when you said you did web design for Harvard?
- A. What I said was: Do you want me to list the projects I worked on for Think Computer Corporation for Harvard or for all of the above? I don't know that I said that I actually did projects for Harvard, and if I said that, I was referring to projects I would have done for Harvard through Think Computer.
- Q. Okay. And that -- to the best of your knowledge, that's the projects you were just listing; correct?
 - A. Yes; that's one of them.
- Q. All right. Now, you also said -- you asked me if I wanted to inquire about any that you may have done just for yourself, any type of web development you did for yourself.
 - A. Correct.
- Q. Were there projects you did just for yourself while you were at Harvard?
 - A. Yes.
 - Q. All right. What were those?
- A. The first project that I worked on for my own benefit and the benefit of my friends was a web-based email system for Harvard students which I called FASt Webmail.
 - Q. When did you develop FASt?
- A. I don't remember the precise date, but it was sometime in 2001, I believe.
 - Q. And it was an email delivery system?
 - A. No. It was a web-based email system.
- $\ensuremath{\mathtt{Q}}.$ And by "web-based email system," what do you mean?
- A. It was a website that allowed you to check your email using no other tools than the website itself.
- Q. Did that -- was it limited to any particular email account? By that I mean was it limited only to Harvard email addresses or was it any type of email address?
- A. It was designed specifically to work with Harvard's email server and by virtue of that design, it was limited to Harvard email addresses.
- Q. All right. And that would be a fas.harvard.edu address?
 - A. Correct.
 - Q. Now, you said you started with FASt.
- A. That was the first project I remember doing.
- Q. All right. What other projects did you do while at Harvard for yourself?
- A. The next project was called CriticalMass which was a web-based course review system that

allowed students to post reviews either using their own name or anonymously.

- Q. And by "a web-based course review" you mean the students would critique the teacher or the professor and the course itself?
 - A. Either or both.
- Q. Was it essentially like a comment-based system?
 - Comments were used in the system. Α.
 - Q. All right. Was it a ranking system?
 A. It also provided rankings.

 - Q. Are you familiar with Slashdot?
 A. Yes. I think that's right.
- All right. And are you familiar with the Ο. ranking system employed by Slashdot?
- A. I believe I know what ranking system you're referring to.
- Q. All right. Would you agree that Slashdot provides comments as well as provides editorial comments on new applications?
 - A. Yes.
- Q. All right. I'm just trying to figure out if CriticalMass worked similar to Slashdot.
 - A. It did not.
- Q. Okay. Going back to FASt. Did you publish that tool to all Harvard students?
- A. It was available for all Harvard students to use.
- Where was -- what server was it run off Q. of?
 - A. Think Computer's primary web server.
- Q. All right. And where was Think Computer's primary web server?
 - A. Physically?
 - Q. Yes.
 - A. Hoboken, New Jersey, at the time.
- Q. All right. And were you remotely logging into it to administer it?
 - A. I did on occasion.
- Okay. And how was it published to the Q. Harvard students?
 - A. I don't understand your question.
- How was information made available to Harvard students to know that they could use FASt?
 - A. I told them.
- All right. And was that by word of mouth Q. or by email, or both?
 - A. I don't recall.
- Q. And you were familiar with the houseSYSTEM -- by that I mean the houses that students live in at Harvard?
 - Yes. Α.
 - Q. All right. Which house did you live in?
- Starting my sophomore year I lived in Α. Lowell House.
 - Q. That's L-o-w-e-l-1; correct?
 - A. Correct.
- Q. All right. And did you always reside in Lowell House or did you reside anywhere else while you were at Harvard?
- A. No. Prior to residing in Lowell House, I live in Gray's Hall.
 - Q. Okay. In 2003 were you in Lowell?
- A. During parts of 2003, yes.
 Q. Throughout the Harvard course year in 2003, were you in Lowell?

- All right. Was there a methodology Q. that you could send emails to all students in the Lowell House if you had some reason to?
 - A. No.
- Q. All right. By that I meant was there a Lowell House group distribution email account?
- A. There was a mailing list called Lowell-Open, but it did not reach all students in Lowell House.
- Q. Okay. How did you become a member of Lowell-Open?
- A. One had to subscribe to the mailing list by either sending an email to the list itself or by using the website set up for that specific purpose.
- Q. Was the same true, if you know, for other houses at Harvard?
- A. To my knowledge, most of the other houses had similar mailing lists, but not all of them were set up in an identical manner.
- Q. All right. Do you know how the -- are you familiar with the house at Harvard called Pforzheimer?
 - A. "Pforzheimer"?
 - Yes. Q.
 - A. Yes.
- Q. All right. Do you know how its group email, if any, was set up?
 - A. I don't recall precisely.
- All right. Are you familiar with the Q. house called Kirkland?
 - A. Yes.
- All right. Do you know how Kirkland's Q. house group email server was set up or address was set up?
 - I don't recall. Α.
 - I'm sorry? Q.
 - I don't recall.
- Q. Okay. Was the use of group email addresses one of the ways you disseminated knowledge about FASt?
- A. No. As I mentioned, I made FASt email in 2001, or I believe 2001, and at that time I was not in a house and so I had no access to house lists.
- Q. All right. Did you run FASt after you entered a house?
 - A. Yes.
- Q. After you entered -- and the house that you entered was Lowell?
 - A. Yes.
- After you entered Lowell, did you then disseminate information about FASt by group email?
 - A. No.
- Q. Okay. Was FASt still operating when you entered Lowell?
 - A. To my knowledge it was.
- Q. All right. But were you taking any effort to publicize it in any way different than you had before you entered Lowell?
- A. Not as its own product, no.Q. Do you have a sense how many people knew about FASt at Harvard?
 - A. Approximately 20 to 30.
- All right. You indicated that the server that operated for FASt was in Hoboken, New Jersey?
 - A. Yes.

- $\ensuremath{\mathtt{Q}}.$ Did you have administrative rights to that server?
 - A. Yes.
- $\ensuremath{\mathtt{Q}}.$ Did you have the ability to review server logs?
 - A. I did.
 - Q. And did that include usage logs?
 - A. Define "usage logs."
- Q. Were you able to determine how frequently people were logging into the FASt website?
 - A. Yes.
- Q. All right. Do you have a sense in the 2001 time frame how frequently people were logging into FASt?
- A. Of those people who knew about it, at least once a day.
- Q. Okay. Now, you then said at some point you developed a program called CriticalMass, I believe?
 - A. Yes.
- Q. All right. When did you develop CriticalMass?
- A. During the fall semester of 2002, if my memory is correct.
- Q. And CriticalMass was a web-based course review initially?
- A. CriticalMass was a web-based course review system .
- Q. All right. Do you have a sense how many people knew about CriticalMass about the time it began operation?
- A. At the time it began operation, I don't know.
 - Q. Did you try and publicize CriticalMass?
 - A. Yes.
 - Q. How did you do that?
- A. I might have used the Lowell-Open mailing list, but primarily I believe it was publicized through articles in The Crimson.
 - Q. And The Crimson is The Harvard Crimson?
 - A. Yes.
- Q. And that's the university magazine or newspaper; correct?
 - A. It's the university newspaper.
- Q. Okay. And when you say that you primarily tried to publicize it through The Harvard Crimson, was that by editorial?
- A. An editorial was at one point written about CriticalMass in The Crimson.
- Q. All right. Were there other ways that Crimson publicized CriticalMass?
- A. I believe also in addition to the editorial an article was also written.
- Q. So to the best of your knowledge, there were two articles in The Crimson about it?
- A. I don't know specifically how many times it was mentioned, but there were at least two articles.
 - Q. Okay. How long did CriticalMass operate?
 - A. Independently?
 - Q. Yes.
 - A. Until August of 2003.
 - Q. What happened in August of 2003?
- A. I combined CriticalMass with other projects I had made at Harvard into houseSYSTEM.
 - Q. And houseSYSTEM is yet another project

that you worked on at Harvard?

- Yes. Α.
- Q. And that was for your own interests?
- I would say more than my own interests. It was for the interests of the student body in general.
- Okay. houseSYSTEM, when did you first start working on it, separate from -- just so I'm clear on this -- separate from CriticalMass?
- A. I began working on it during the summer of 2003.
- Okay. And sometime in August of 2003 you Q. integrated CriticalMass into houseSYSTEM?
 - A. No.
- All right. You said CriticalMass operated independently up until August 2003.
 - A. Correct.
 - Q. What did you mean by "independently"?
 - I meant outside of any other project. Α.
- Q. All right.

 A. Your previous question was incorrect as a statement because I integrated CriticalMass as I worked on the project throughout the summer but only took down the independent version in August.
- Q. Okay. Was CriticalMass integrated in some fashion into houseSYSTEM by August 2003?
 - A. Yes.
- Okay. What was houseSYSTEM as of August Q. 2003?
- Generally speaking, it was a student portal that allowed students to set up proposed course schedules, to review courses, to buy and sell textbooks, to buy and sell items from other students, to post on a message board for each house, to provide contact information for each house in a standardized fashion, to provide pictures of each house in color, which for Harvard was something new, and to generally foster a better sense of community within each house.
- Q. Now, when you say "each house," you're referring to each of the Harvard houses like Lowell?
- A. Yes. And also there was a site for the Harvard Yard for freshmen.
- Q. All right. And the Harvard Yard is the houses like Gray's Hall that you referred to; correct?
 - It comprises those residences. Α.
- Q. All right. Do you recall when houseSYSTEM was made available to the Harvard student body?
- A. It was made available publicly on August 1st, 2003.
- Q. And how was it made available -- let me first break those in two.

You say "made available publicly." What do you mean by "publicly"?

- A. Some members of the student body had access to houseSYSTEM before because they were assisting in its development, but the student body as a whole had access as of August 1st.
- Q. Okay. And how did the student body as a whole have access as of August 1st?
- A. They could visit the website for their respective residence on the Internet.
- Q. Okay. houseSYSTEM, where was the server that operated for it located?
 - A. Hoboken, New Jersey.

- Q. All right. Is it the same server that you used for FASt?
 - A. Yes, it was.
- Q. All right. And so, again, you still had administrative rights to the server as well; correct?
 - A. Yes.
- Q. All right. Did that permit you to view the amount of usage of the site?
 - A. Yes, it did.
 - Q. On a daily basis?
 - A. If I so desired, yes.
 - Q. And also on a monthly basis?
 - A. In aggregate, I suppose, yes.
 - Q. Mr. Greenspan --

MR. COOPER: Let's mark this (indicating). (Whereupon, Greenspan Exhibit 1 was marked for identification.)

BY MR. COOPER:

Q. Mr. Greenspan, I put in front of you a notice of deposition, Exhibit 1.

Prior to today, did you receive a copy of this document?

- A. Not to my knowledge.
- $\ensuremath{\text{Q}}.$ If you turn to the third page of the subpoena.
 - Do you see that?
 - A. This page (indicating)?
- Q. Yes. Do you know if you received a copy at least of the subpoena?
 - A. I did.
- Q. All right. And there's on the final page of the document a list of items that are listed under an Attachment A.
 - A. Yes.
- Q. All right. Those are documents that were requested by the subpoena. Do you understand that?
 - A. Yes.
- Q. All right. Did you in fact look for documents that fell into the various categories shown 1 through 11 on Schedule A -- or Attachment A?
 - A. I did.
- Q. All right. Can you tell me what sources you searched to respond to the subpoena.
- A. From my own memory, digital files I have from my time at Harvard and paper files from my time at Harvard. That's primarily it.
- Q. All right. When you say you have digital files from your time at Harvard, are those files on your own computer at home, for instance?
 - A. They are files on my own computer.
- ${\tt Q.}$ Are they also files on any website you operate?
- A. Yeah. I'm sorry. Not on websites I operate. But, for example, The Crimson's website would be a website that I looked at.
- $\ensuremath{\text{Q}}.$ Okay. And you still have copies of your Harvard email with you?
 - A. I do.
- Q. Do you have a complete copy of all emails you had while you were at Harvard?
- A. I have a copy of every email I did not delete; yes.
- Q. Okay. And those were amongst the records you searched as well; correct?
 - A. Yes.

MR. COOPER: All right. I will mark

Exhibit 2.

(Whereupon, Greenspan Exhibit 2 was marked for identification.)

BY MR. COOPER:

Q. Mr. Greenspan, I put in front of you apparently a text document that was an email that was sent at an earlier date dated August 1st, 2003.

Is this one of the documents that you were able to produce as part of this litigation in response to the subpoena?

- Α. Yes.
- Q. All right. First of all, the email account says that it was sent from Harvard SEC, info@harvardsec.org.

- I do.
- All right. Harvard SEC, is that a group Q. that you belonged to?
 - Α. Yes.
- All right. It's a student organization at Q. Harvard?
 - Α.
- Q. All right. What was the formal name of that student organization?
- A. At one point in time it was the Harvard Student Entrepreneurship Council. Later on we were asked to change it to the Harvard College Student Entrepreneurship Council.
- Q. Is that because someone was using the acronym SEC, another student group?
 - A. No.
- All right. What was the reason you were Q. asked to change the title?
 - Α. I wish I knew.
- All right. Who asked you to change the Q. title?
 - Α. Judith Kidd.
 - Who is Judith Kidd? Q.
- She was and I believe is a dean at Harvard Α. College.
- All right. As of August 1st, 2003, Q. however, the group was still called Harvard SEC; correct?
- A. At that time it was called Harvard SEC. Q. How many students were members of the organization, if you know?
 - A. I don't recall.
- Do you have an idea of approximately how many?
- A. I believe there were probably 25 active members and many other people who may have considered themselves members but were not necessarily active.
- Q. Okay. Did you have any position with Harvard SEC?
- A. At the time of this document's creation, I was the president.
- Q. All right. That means you were president of Harvard SEC as of Friday August 1st, 2003?
 - A. Yes.
- All right. And as a student group at Harvard it had rights to create its own email account; correct?
- A. As a student group at Harvard it had a right to create an email account on the Harvard

Computer Society server, which we elected not to use.

- Okay. Do you know -- the email in front of us says "Harvard SEC." Do you know how many people had rights to that email address?
 - A. Harvard SEC is not an email address.

Which email address are you referring to?

Q. In the "From" line, it says From: Harvard SEC.

MR. FURBUSH: "Info@harvardsec.org"?

MR. COOPER: Yes.

THE WITNESS: Two people had access to

that email account.

BY MR. COOPER:

- Okay. And who were those two people? Q.
- Myself and Felix Yu. Α.
- Q. All right. Now, it says that it was sent to houseSYSTEM administrator.
 - A. Yes.
- Q. All right. Who was houseSYSTEM administrator?
 - A. Me.
- Q. All right. What email account would houseSYSTEM administrator have been using?
 - A. Info@harvardsec.org, I believe.
- Q. Okay. The email in front of me indicates -- it has the title "Welcome to houseSYSTEM."
 - A. Yes.
- Q. All right. Was this an introductory email that you prepared to send to other students to introduce -- to let them know about the creation of houseSYSTEM?
 - A. Yes.
- Q. All right. Do you know to whom this email was sent, if anybody, other than the people in the "From" and "To" line on this email?
- A. Approximately 500 other students who were on SEC's mailing list at the time.
- Q. Okay. How did the SEC generate a mailing list?
- People who signed up for CriticalMass, Textbook Central, and the club itself were all on that mailing list.
- Q. All right. And they -- and people who had signed up for those projects would have a harvard.edu address?
 - A. By and large they did.
- All right. Did people outside the Harvard community actually have access at times?
 - Yes. Α.
- Okay. So you did have -- or you did Q. have email accounts that this could go to outside of harvard.edu email addresses?
 - A. Theoretically, yes.
- Q. Do you know one way or the other?
 A. For example, I may have shown my father who is not at a fas.harvard.edu account.
- Q. Okay. But the email shown on Exhibit 2 was sent to approximately 500 people, to the best of your knowledge?
- A. Approximately and to the best of my knowledge, yes.
- Q. And that was largely the Harvard community; correct?
 - A. Yes.

Q. All right. Is the text that's shown on Exhibit 2 the text that was actually also sent to all students?

MR. FURBUSH: Did you say "all students"? MR. COOPER: Or the 500 or so that he's referring to.

THE WITNESS: This is not a copy of a prepared email in the sense that it was written ahead of time. This is a copy of the email that was actually sent.

BY MR. COOPER:

- Q. Okay. That's -- you anticipated my next question. This is the email that was distributed to all students that you were referring to to notify them of the existence of houseSYSTEM; correct?
 - A. Yes.
- Q. All right. In the email it states that you already have an account.

Do you see that in this first paragraph?

- Yes. Α.
- And by "account" is that meaning that that was the fact they were on the distribution list?
- A. As I mentioned previously, members of CriticalMass were automatically integrated into this site as well as members of Textbook Central, and so their accounts for those sites was effectively the account they already had for houseSYSTEM.
- Q. Okay. And what information comprised the account? Let me strike that.

Did you have to register to be a member of FASt?

- Α. No.
- All right. Did you have to register to be Q. a member of CriticalMass?
 - A. Yes.
- Q. All right. What information do you have to provide to register to be a member of CriticalMass?
- A. I don't recall, but among other things, first name, last name, email address, gender perhaps. Basic personal identification information.
- Q. All right. Now, you said that you have a lot of experience in back end development; correct?
 - A. Yes.
- Q. And one of the things back end does is populate a database; correct?
- A. One of the things SQL can do is insert data into a database.
- Q. All right. Was CriticalMass an SQL-based program?
- A. CriticalMass did use SQL for its database. Q. All right. So when it populated its database, the information that was used in the database would have included the email addresses; correct?
 - A. Yes.
- Q. All right. And you understand that a database will be set up by fields; correct?
 - A. Yes.
- All right. So one of the fields would be Q. an email address; correct?
 - A. Yes.
- All right. And one of the other table fields might have been the name of the student; correct?
 - Α. Yes.

- Q. All right. Because you said you thought they might have to register by first and last name.
 - A. To the best of my ability to recall, yes.
- Q. Yes. And that information necessarily would also be populated into the database if it existed; correct?
- A. When you say "if it existed," if it were supplied by the student, yes.
- Q. That's exactly what I meant. Thank you. In the first sentence of the second paragraph you say, "Plan your shopping period. See who owns the textbooks you want. Sell your fridge. Browse the message board."

Do you see all that?

- A. Yes.
- Q. All right. How did houseSYSTEM facilitate planning a shopping period?
- A. I designed a web-based calendar that showed a week-long view to which you could add hypothetical courses that you were interested in taking -- or I should say actual courses that you were hypothetically interested in taking, and the end result was a view of your possible week for school in which you could see which classes conflicted with each other.
- Q. Similarly, how would a student who owns textbooks know -- it says, "See who owns the textbooks you want." How would the student advertise that they have the textbooks they want on the houseSYSTEM?
- A. People would not advertise the textbooks they themselves wanted at first, but eventually you could either say that you were interested in these classes through the shopping period schedule and therefore you had an inherent interest in the textbook for those courses, or later you could say I am interested in these books specifically, and people who owned those books already could read that request and contact you with information on how to obtain them.
- Q. All right. Did houseSYSTEM link students in different houses?
 - A. It did.
- Q. All right. So if were you in Lowell House, you weren't limited to selling your refrigerator to another student in Lowell House?
 - A. Correct.
 - Q. All right. How did it link the houses?
- A. Although to the viewer it appeared that each house had its own website through houseSYSTEM, because all of them were sharing the same database on the back end, there really wasn't any difference between the sites except for the front end; meaning the photographs, the color scheme, the wording for the house, et cetera.
- Q. Now, when you say on the front end the color scheme and wording and all that would appear different, does that mean if I were in Lowell House, a Lowell House graphical user interface would present itself to me?
 - A. That's correct.
- Q. And if I was in Pforzheimer House, a Pforzheimer House graphical user interface would present itself to me?
 - A. Also correct.
 - Q. But because they had a common database,

I as a Pforzheimer student could still see what was being sold by a Lowell student?

- A. Yes.
- Q. All right. And for the same reason I could email somebody in Lowell House if I was in Pforzheimer House as long as I knew what their email address was?
- A. You could also do that without houseSYSTEM; but yes.
- Q. Let me clarify. It does say "Check your email" in the second sentence of the second paragraph; correct?
- A. Yes. But presumably you'd only want and be able to check your own email address.
- Q. All right. But did you have an ability to send email from houseSYSTEM, too?
- A. houseSYSTEM was tied to my FASt web mail project and because of that, you could send email. But as I mentioned, the email system inherently allows you to communicate with people outside your own domain.
- Q. Okay. It also refers to browsing a message board $\mbox{--}$
 - A. Yes.
- Q. -- this email I'm referring to.

 Was there one message board or many message boards set up on houseSYSTEM?
 - A. Many.
- Q. Okay. And did they involve a number of group activities, for instance?
 - A. Group activities?
- Q. Well, let me -- could it be something like if you were trying to find fans of the television show Lost, would you be able to do that on a message board?
 - A. Sure, I supposed so.
- Q. All right. What were the types of message boards that were set up is all I'm getting at?
- A. Academics, extra curricular activities, traveling. I don't recall all of them, but there were several.
- Q. And could it include group interests? Like I was referring to, like common interests in a television show?
 - A. Sure.
- Q. Okay. Or common interests in a type of activity that everybody might be interested in, like a party?
 - A. Yes.
- Q. Okay. It says "Search Google" in the second sentence of the second paragraph.
 - A. Yes.
- Q. All right. How did you present an interface from houseSYSTEM to the World Wide Web?
- A. There was one search box on the home page that allowed you to choose what you wanted to search and one of the options was Google.
 - Q. Okay. And could it also have been Yahoo?
 - A. No.
- Q. How did you limit what the search options were?
- A. By specifically delineating them in the HTML I wrote for that page.
- Q. All right. What search engines did you delineate for houseSYSTEM besides Google, if any?
 - A. To the best of my knowledge, the FAS name

directory, the FAS phone directory, Google, The HSA Unofficial Guide and possibly others, but I think that was all of them.

- Q. It also says, "Query The HSA Unofficial Guide for a Thai restaurant you haven't already been to."
 - A. That's correct.
 - Q. "HSA" is Harvard Student Administration?
 - A. Harvard Student Agencies.
- Q. Okay. Did you have a direct reference to the unofficial guide -- some type of guide prepared by HSA?
- A. The HSA Unofficial Guide is a paper and at that time it was also an electronic document, and I specifically negotiated with HSA for the ability to query their guide directly.
- Q. All right. Did any other student or Harvard activity groups also allow you to link to their activities?
 - A. Not in the same manner.
- $\ensuremath{\mathtt{Q}}.$ Okay. Did they allow them in some other manner?
- A. At some point I developed a website for the Harvard Chemistry Club and integrated its calendar, or attempted to, with houseSYSTEM.
 - Q. Any others?
 - A. Not that I recall.
- Q. Okay. It says, "See if you have packages."
 - A. Yes.
 - Q. What are you referring to there?
- A. Unfortunately, this feature never actually panned out because of the administration's opposition. But the idea was to have superintendents type in a package that you received at the front desk so that you wouldn't have to go check a clipboard every 10 minutes when you were expecting a package.
- Q. All right. And that's because packages come to each of the houses to a specific individual; correct?
 - A. To the superintendent.
- Q. Right. And you would add an expectation that superintendents would all have access to houseSYSTEM, too; correct?
- ${\tt A.}$ They did have access, but nobody actually used that particular feature.
- Q. Okay. But it was the hope that they would have used it to notify students whenever a new package arrived; correct?
 - A. That was the hope.
 - Q. Okay. It says "Get a job."
 - A. Yes.
 - Q. What did you mean by that?
- A. Alumni had access to houseSYSTEM so that they could post job openings at their companies and students had access to upload their resumes, so my intention was to make an easy way for people to get jobs.
- Q. Okay. It says, "Hitch a ride to Barcelona."
 - A. Yes
- Q. And how would a student communicate an interest in getting a ride to Barcelona from another student?
 - A. On the student exchange section there was

a specific area for rides, and if a student was going to a particular destination and had room for a passenger, then they could post that information on that section.

- Q. All right. Then it says "Reserve rooms."
- Α. Yes.
- Q. What rooms are you referring to?
- Unfortunately, this is another feature that never worked but was well intentioned to coordinate room reservations throughout the Harvard campus, which were extremely decentralized and difficult to work with.
- Q. Did you set up in the system the capacity for that to have occurred if it had been popular enough to?
- A. As I recall, I did do considerable work on a room reservation schema.
- Q. Okay. And did that also include a room reservation script?
 - A. I don't recall. I don't think so.
- All right. But you definitely set up the back end for it?
 - Α. Yes.
- Q. Okay. Did you also set up the back end for the "See if you have packages" function?
- I don't recall. Okay. It then says, "Find out which houses have bright blue doors."
 - A. Yes.
- Q. Okay. How would a student know which houses have bright blue doors?
- A. houseSYSTEM featured over 250 photographs of the houses, or if not over, then approximately 250, and some of them in fact did have bright blue doors.
 - All right. These were like JPEG images? Q.
 - I believe they were JPEG images. Α.
- Did houseSYSTEM have the capacity to have multimedia?
 - A. Yes.
- All right. What multimedia was permitted Q. on houseSYSTEM?
- A. There was a Flash trailer for houseSYSTEM, which was if you want to use the word "multimedia" to describe video, the main multimedia associated with the site.
- Okay. Did it have audio capacity on the Q. site?
- That particular trailer did have an audio track.
- Okay. Was there any other form of video available other than that Flash?
 - A. Not at the time, no.
 - At a later time there was?
- A. At a later time there could have been. In 2003 video had not yet really gained the traction that it has today.
- Q. Okay. You list, "Give the administrators those evasive preregistration statistics that they can't seem to come up with."
 - Yes. Α.
 - Q. What is that a reference to?
- At the time there was a substantial controversy on campus at Harvard -- excuse me -regarding the concept of preregistration. The center of the controversy was that the deans claimed

preregistration would better allow them to allocate resources for courses, but students opposed that because it meant that they could no longer try out as many courses as they wanted to.

And this particular sentence is conveying the notion that on houseSYSTEM one could posit possibilities for classes that one wanted to take without necessarily being committed to take those classes, and in so doing still generate the interest statistics that the administration needed without eliminating students' capability to shop courses.

- Q. You say the "sentence is conveying the notion that on houseSYSTEM one could posit possibilities for classes." What do you mean by "posit possibilities for classes"?
- A. If I wanted to try out 20 classes for my upcoming semester, I could put all of those classes onto my shopping period scheduler. I wouldn't have to take all 20 of them, but the database would still register that I was interested in all of those courses.
- All right. Was this an interactive Q. program then?
 - Α. Define "interactive."
- Did it require input and then would give you further output that you could manipulate for additional inquiries?
 - A. By that definition, yes.
- All right. Maybe a better word would be it was an iterative program?
- A. Most software is iterative at some level; so yes.
- Okay. But do you understand -- I'm talking hierarchically within the graphic itself.
- A. You could click on a course in the scheduler and find out more about that course, and if you so chose, you could then change your mind based on the next round of information you received.
- Q. Okay. That's exactly what I was trying to figure out.

It says here, "Now it's all in one place" and "It's all student run" -- or "Now it's all in one place. It's all student run."

- Yes.
- When it says "it's all student run" what Q. did you mean?
- A. I meant that all of the above features described in the preceding paragraph were put together by and maintained by students such as myself and my peers in the Student Entrepreneurship Council.
- You said you had administrative rights for Q. houseSYSTEM.
 - A. Yes.
 - Q. Did anybody else?
 - Α. I don't recall.
- You said you were the president of the Harvard SEC as of August 1st, 2003.
 - Yes. Α.
 - Who were the other officers? Q.
- Α. I know their names, but I'm not sure I remember all of their titles. Rodica Buzescu, Piriya Tantrativud; he's Thai. Wentao Mo, Rui Dong. We had a rotating spot to get outside input which was at one point filled by Phillip Dreyfus. I'm

sure that there are documents available which list all of their names, but I think that's the majority of the people involved.

- Q. All right. Did they have any roles in operating houseSYSTEM?
 - A. Yes.
- Q. All right. Who besides yourself operated house $\ensuremath{\mathsf{SYSTEM?}}$
 - A. Define "operated."
- Q. First, let's take it one step at a time. Were you the exclusive person -- did you exclusively create the back end for houseSYSTEM?
 - A. Yes.
- Q. Did you exclusively create the front end for houseSYSTEM?
- A. I exclusively created it, but it was modified by Wentao.
- Q. And that was one of the people you mentioned was another officer of Harvard SEC?
 - A. Yes.
- Q. All right. Did anybody else assist in modifying any portion of houseSYSTEM?
- A. Not the code or the design, although I did get feedback, of course, from other people which then influenced the work that I did after that feedback was received.
- Q. And would the feedback be in the form of saying what features were popular and what features weren't?
 - A. That is one form of feedback.
- Q. And another form of feedback, I take it, as you said, for instance, the Harvard administration wouldn't let you see if the packages function -- you had anticipated that houseSYSTEM would allow you to know when packages were available, and I think you said that Harvard didn't permit that eventually?
- A. I don't know that I said Harvard didn't permit it. I said it wasn't used, and that, yes, it could be another form of feedback.
 - Q. All right. Any other forms of feedback?
 A. I believe we received a considerable
- A. I believe we received a considerable number of emails from the students with their positive and negative thoughts about the site.
- Q. When you say "we received," was there a group email account created for everybody who was a member of Harvard SEC?
- A. No. Because that would have been a large number of people. The mailing list was fairly large.
- Q. Okay. So would it have been primarily you who would receive the feedback?
- A. I suppose primarily, but also Felix had a lot to do with reading and responding to emails.
- Q. Okay. Besides sending out this email on August 1st, 2003, to the 500 or so you say were on your distribution list already, did you take any other action to publicize houseSYSTEM?
 - A. Yes.
- Q. And by "you" I'm referring, first of all, specifically to you personally.
 - A. Yes.
 - Q. All right. What else did you do?
- A. As I mentioned, I created the multimedia trailer for the site which I believed would attract interest. I at one point created posters that

were printed and posted throughout the campus. I designed magazine advertisements that were printed in Venture Magazine for houseSYSTEM. We created banners and other printed materials for distribution.

We stood outside the freshmen dining hall with leaflets for students as they walked in to eat. We sent out emails. We coordinated with the Technology Entrepreneurship Center at Harvard as much as we were able to.

And we attempted to set up a kind of marketing event with HSA as part of our deal regarding the unofficial guide access where we were permitted to market houseSYSTEM to freshmen when they came to register for the new school year in September.

There were considerable marketing activities surrounding houseSYSTEM.

- Q. All right. And you referred to "we." Does that mean other members of Harvard SEC also were making efforts to advertise?
- A. Yes. A majority of the efforts that the other people I mentioned were responsible for involved marketing.
- Q. Okay. So would it be fair to say it was your intention to publicize houseSYSTEM to the entire Harvard community?
 - A. Yes.
- Q. Did you take any action to actually advertise it to the alumni?
 - A. Yes.
- $\ensuremath{\mathtt{Q}}.$ What specifically did you do to let the alumni know?
- A. My father is a Harvard alum and so I told him. I had clients who were Harvard alumni and I told them. I sent out emails. I got in touch with people I worked with in the past who were Harvard alums and told them about it, and encouraged them to tell their friends, et cetera.
- Q. All right. You also mentioned the multimedia banner was intended to generate interest. In what way would the general community know about the multimedia banner?
- A. The multimedia trailer was online at the link in the last paragraph before the footer of this email in Exhibit $2. \,$
- Q. So it was available at an http worldwide website harvardsec.org/project/housesystem.html?
 - A. That's correct.
- Q. And that http site was made available to all students if they actually -- if they knew to find it in their web browser?
 - A. Yes.
- Q. All right. And house -- am I correct to know that harvardsec.org was itself set up under the Harvard system to advertise the organization?
- Q. www.harvardsec.org was its own website; correct?
 - A. Yes, by definition.
- Q. Okay. How would a Harvard student know that website existed?
- A. They would have to receive an email with the link or find the link on another page or hear of the link from a friend or read it somewhere in

general.

- Q. Do you know if Harvard had anywhere on its own interface a list of student organizations?
 - A. It did.
 - Q. And was Harvard SEC listed among them?
 - A. This is a source of serious contention.
- $\ensuremath{\mathtt{Q}}.$ All right. What is the serious contention?
- A. When I applied to Harvard, there was a group called the Technology and Entrepreneurship Center at Harvard, which still exists, and I use the word "group" because it was not clear at the time whether this was a student group, which is how it was presented, or some other entity.

In reality it was an official center at Harvard with an endowment account and that center spun off a student group which was then presented to students as the entire center.

That group was led by an individual who managed through his efforts to substantially reduce the amount of interest in technology and entrepreneurship at Harvard, and so eventually I was elected the club's president and changed its name to distance the club effectively from itself due to its poor reputation.

And in changing the name I thought that we would still have Harvard student group status while the administration later decided that it effectively revoked our student group status, and that was the source of contention.

- Q. You say the administration later decided it effectively revoked your student group status. As of August 1st, 2003, had it done so?
 - A. Can you rephrase that?
- Q. In your last response you said, "And in changing the name I thought that we would still have Harvard student group status while the administration later decided that it effectively revoked our group status."
 - A. Correct.
- Q. And what I'm focusing on is: You say the administration later decided that they effectively revoked your group status.
- A. Correct. It was apparently a retroactive decision.
- $\ensuremath{\text{Q.}}$ As of August 1st, 2003, had Harvard done that, though?
- A. I don't recall the precise timeline of when Rodica received approval from Susan Cooke for the name change in University Hall. But I believe as of August 1st, 2003, everyone in the club I was running believed that we were a Harvard student group.
- Q. All right. Do you know one way or the other whether or not your group was listed amongst the student organizations on the Harvard website?
- A. I do know that the Technology and Entrepreneurship Center at Harvard Student Association was listed as a student group, which in turn referred to the Harvard SEC once we changed the name.
- Q. Okay. So at some point in time a student could find out about Harvard SEC via the Harvard site itself?
- A. I don't know that for certain, but it's entirely plausible.

- Q. All right. And at least you yourself found the technology group -- or I forget the official title you gave, but you yourself as a student applicant saw that group; correct?
- A. Yes. And I found that group I believe through the Division of Engineering and Applied Sciences' website.
- Q. In publicizing the houseSYSTEM in about August 1st, 2003, did you also in any way try and use The Harvard Crimson as a resource?
- A. My intention was, as much as possible, to get positive coverage for the site in The Crimson.
 - Q. Did that actually happen?
 - In my opinion, no. Α.

MR. COOPER: Okay. Do you want to take a break right now or do you want to --

MR. FURBUSH: At some point, but there's no urgency.

MR. COOPER: Do you mind if I just ask about this (indicating)?

And, Mr. Greenspan, we've been going about an hour and a half, then we can take a break.

THE WITNESS: That's fine.

(Whereupon, Greenspan Exhibit 3 was marked for identification.)

THE WITNESS: Thanks.

BY MR. COOPER:

Q. Mr. Greenspan, I put in front of you as Exhibit 3 an online copy of The Harvard Crimson, an article called "Student Site Stirs Controversy," published August 8th, 2003, by Laura Krug.

Do you see this?

- Yes.
- Q. Do you recall ever having seen this article prior to today?
- A. Yes, I do.
 Q. The date is one week after your houseSYSTEM started; correct?
 - A. Correct.
- Q. And it refers to in the first paragraph, "A sharp debate raged on Lowell House's open email list this week after security issues were raised concerning a new student-run web portal launched last Friday that promised a place to trade textbooks, read and give feedback on classes and plan a class schedule."
 - A. Correct.
- Q. One thing I should ask before I go on with this: You said that you had by August 1st, 2003, integrated the functions of CriticalMass into houseSYSTEM.
 - A. That's correct.
- Q. Is there a reason you don't mention rating courses in the email that was sent out on August 1st?
- A. I don't think there was a particular reason, no.
- Q. All right. But that was a function that also was available from houseSYSTEM as of that date; correct?
- A. Yes. And there were actually other functions as well that are not listed in Exhibit 2, but I was writing marketing copy. It was probably written late at night; the night before, and I figured people wouldn't actually be interested in an exhaustive, detailed list of every feature.

- Q. Okay. Did you have as part of your database a list of all courses available at Harvard?
 - A. Yes.
- Q. How did you populate your database? From what source did you populate your database with that information?
 - A. The Harvard Registrar.
- Q. Okay. And the Harvard Registrar was an open email -- or an open website?
 - A. Yes.
- Q. Well, what I want to make clear is: Did you get the information online or did you get it in hard copy?
 - A. I got it online.
- Q. All right. And then you used the online information to populate your database with all course information made available at Harvard?
 - A. Correct.
- Q. All right. Just generically, what other major functions existed in houseSYSTEM that weren't listed in your original email?
- A. I actually think one of the most -well, there were two features that were extremely
 frequently used that I didn't even intend to become
 major features I think. One of them was simply
 having contact information for the administrators at
 each house which was easily available in the same
 place on every site. Previously that had been hard
 to find.

The second was the pictures for each house compromised an effective online photo album which people would frequently view, and I could tell this by looking at the logs and seeing them reloading the home page again and again for no other reason than to see the pictures.

- ${\tt Q.}$ Could students upload their own pictures to the site?
- A. Eventually they could, although it was not a popularly-used feature.
- Q. Do you know how or when it was made available?
 - A. I don't recall.
- Q. Could students upload, for instance, any other type of information to the site? Say like student text?
 - A. Student text?
- $\ \mbox{Q.}$ Could they upload any text information to the site?
- A. Well, yes, that was the entire point of the site.
- Q. Okay. I mean by that did they have -- did each user have their own unique, for instance, user page?
- A. No. For the specific reason that -- well, if you continue your line of questioning regarding this article, you will find that there were privacy issues involved and I was extremely afraid of being kicked out of school for, quote-unquote, "violating user privacy."
- Q. Okay. Before this controversy erupted, though, did any user have any specific user information that they would be presented upon using houseSYSTEM?
- A. Information was available on users. There was no user profile page per se.
 - Q. Okay.

- But if you read enough book profiles or course profiles, you could composite an idea of what a user was taking in terms of course load, what books they owned, et cetera.
 - Q. Okay.
- But that was done very intentionally at Α. the time.
- Q. Now, in The Harvard Crimson article dated August 8th, that refers to the Lowell House open email list?
 - A. I believe so, yes.
 - Q. Do you have an understanding what that is?
 - Α. I do.
- Q. All right. What is it?
 A. As we discussed previously, it was a mailing list available to some but not all Lowell House undergraduates and graduate students.
- Q. And in that sense, that's the same type of email list you said you understood existed at all other houses, but although perhaps not in the same precise function?
- A. Yes. And by that I mean some of the lists were open -- though they were all called "open," some of them were actually open to outside postings; others were not.
- Q. By "outside postings" you mean outside the house or outside Harvard?
- A. Outside the house but still de facto within Harvard. Technically if they were open to anyone outside the house, I believe they were open to anyone that was approved, whether or not they were actually at Harvard.
- Q. Okay. But some house lists were exclusive to only members of the house?
 - A. Yes.
- Okay. Do you know which houses those Q. were?
- A. As I mentioned earlier, I don't recall. There were 12 mailing lists, all of them run completely differently so...
- Q. Okay. And that's because there were 12 houses; correct?
 - A. Yes.
- Q. Now, it says that this sharp debate on Lowell's House's open email list emerged sometime on or before August 8th, 2003. Do you have an understanding of what that's referring to?
 - A. Yes, I do.
- Q. Okay. What is it referring to?
 A. Effectively there were certain individuals in Lowell House who believed that houseSYSTEM was insecure, and despite my repeated attempts to dissuade this belief, they persisted in writing inflammatory messages that concerned many people.
- Q. And do you know if those messages went outside of Lowell?
- A. Apparently because I don't believe Laura Krug was in Lowell House.
- Q. Okay. Do you know when this concern by others emerged about the security issue?
- A. Between August 1st and August 6th, I believe.
- Q. Okay. Down at the bottom it says that -very near the bottom do you see where it says, "Greenspan said enthusiasm seemed high"?
 - A. I do see that.

- Q. All right. Did you talk to Laura Krug for this article?
 - A. Yes.
- Q. All right. And then it says, "Between the launch of the portal on August 1st and Tuesday night 400 accounts have been registered."

- A. Yes.
- Q. All right. And in the first paragraph it said the site launched on a Friday.
 - A. It does say that, yes.
- Q. So all I'm getting at is: Does that in any way refresh your recollection if whether or not 400 accounts had been registered as of August 5th, 2003, with houseSYSTEM?
- A. I'm not sure whether or not Laura's reporting is precisely accurate, but it seems to be consistent with my memory that 400 accounts had been registered as of the time of this article which was August 8th.
- Q. All right. All I'm getting at is: To the best of your knowledge, somewhere between 4- and 500 people were using it at the very outset?
 - A. Correct.
- Q. Okay. It says here that in the second paragraph, "While its creator lauded it as a much-needed resource for students, critics said they were concerned that the site's web-based email function -- which requires a user to provide their Faculty of Arts and Sciences (FAS) account password -- poses a security risk."
 - A. I'm sure that's somewhere in here.
- $\ensuremath{\mathtt{Q}}.$ It's in the second paragraph of the entire article.
 - A. Oh, yes.
- Q. I just want to know: What is the Faculty of Arts and Sciences FAS account password?
- A. The fas.harvard.edu server uses a Unix-crypted password which is required to gain access to any of its resources, including email, and I believe that is the password being referred to.
- Q. Did you have to provide your FAS account password to register with the site?
- A. At the time I believe you did so as to verify that you would later be able to check your email.
- Q. All right. Did it require any other type of password to register?
 - A. No.
- Q. All right. And you understand what I mean, if you had a user account, did you need a separate password to access houseSYSTEM?
- Q. All right. So the FAS account password was very specific to the use of the email?
- A. Correct. Had we not required the email feature, then we would not have required that FAS password.
- Q. Okay. As a result of this controversy, did you have to take down houseSYSTEM at all?
- A. I had to suspend the ability of the sign-up page to work. I was encouraged to take it down, but I did not take down the whole site.
- Q. All right. So you changed a feature of the registration process but you didn't take down

the site?

- A. I effectively disabled the registration process but I did not take down the site.
- Q. All right. By disabling the registration process, though, you did not make the site unavailable to anybody who wanted to use it?
- A. That's not entirely true. There may have been people who wanted to use it who could not register.
- Q. After you disabled the registration function, could any new users use the site?
- A. When you say "new," if you mean people who had already registered, those members who were already in the database could still use the site, but those people who wanted to effectively be entered into the database could not because the page to sign up was no longer functioning.
- $\ensuremath{\text{Q}}.$ All right. That's exactly what I was referring to.

My only question now is: Did there come a time when users other than those who had originally registered could in fact gain access to the site?

- A. Yes. Almost two months later.
- Q. All right. And that would have been about October 2003?
 - A. Late September.
 - Q. Late September.

MR. COOPER: Okay. Why don't we take a

break.

THE VIDEOGRAPHER: This marks the end of tape 1 in the deposition of Aaron Greenspan.

Off the record at 10:36.

(Off the record.)

THE VIDEOGRAPHER: This marks the beginning of tape 2 in the deposition of Aaron Greenspan.

On the record at 10:51.

BY MR. COOPER:

- Q. Mr. Greenspan, before we broke we were discussing the August 8th, 2003, Crimson article "Student Site Stirs Controversy." At a high level, can you describe what the controversy was relating to the houseSYSTEM that erupted in the week after you first launched it.
- A. At a high level, the controversy was surrounding the requirement for students to use their FAS passwords to sign up.
- Q. Was the concern that the use of the FAS password was unsecure?
- A. No. Initially the concern was that non-Harvard entities requesting FAS passwords; meaning students requesting FAS passwords, was prohibited and so people felt as though this was someone outside of Harvard asking for people to betray their Harvard credentials.
- Q. Okay. In the article about two-thirds of the way down it says, "Greenspan defended the security of his site, saying that a student's houseSYSTEM account is kept completely separate from his or her Harvard student account."

- A. Yes.
- Q. As you sit here today, do you have an understanding of what is meant by that sentence?
 - A. No.
 - Q. Okay. Below that it seems to quote you

saying "'We can't access those and shouldn't access those, 'he said. 'Our database is kept separate from that.'"

- Yes.
- All right. Again, do you have an understanding of what you meant by saying, "Our database is kept separate from that," if that's an accurate quote?
- A. If the quote is accurate, I believe it refers to the point in my conversation with Laura Krug, whenever that was for the purpose of producing this article, in which I was referring to the notion that we would be able to with a student's Harvard ID and password somehow log into Harvard's student records database.
- Q. All right. That's what I was trying to get at. houseSYSTEM didn't operate off of two separate databases, did it?
 - A. It operated off of one primary database.
- Q. And that's the database that was in Hoboken, New Jersey; correct?
 - A. Correct.
- Q. All right. MySQL would populate that database and not a Harvard server; correct?
- A. Correct. There was no connection whatsoever to any Harvard official server except for the email feature which relied on the Harvard email server.
- It relied on the Harvard email server for Q. sending and receiving; correct?
- A. No. It relied on the Harvard email server for authentication.
- Q. All right. I thought you said earlier you had a table set up in your own database that also required the identification of the Harvard email address by each registered user.
 - A. That's correct.
- Q. All right. But the database you're referring to is for authentication for the actual access of the information by that student; correct?
- A. I'm referring to a lot of databases so the houseSYSTEM authentication mechanism worked as follows: A student would provide their email address and password, houseSYSTEM would without reading that password forward the password along to Harvard's email server. Harvard's email server would say either yes, that is correct, or no, that incorrect. If it is was correct, it would also send back the number of new messages, and if it was correct, the hash of the password provided would match the hash stored in the database.
- Q. Okay. So when you referred to hash match, you're referring to an encryption program; correct?
- A. Technically hashing and encryption are different, so no.
- Q. Is it common to refer to hashing as a form of encryption, though?
- A. Unfortunately, yes. Q. Okay. Would you at least agree it's an authentication methodology?
 - Α. Yes.
- All right. And the hashing that was done by houseSYSTEM was done against the authentication information that was provided by Harvard concerning the student password?

- It was provided by Harvard students, not provided by Harvard.
- Q. Right. But that information existed outside of houseSYSTEM; correct?
 - A. I'm not sure what you mean.
- All houseSYSTEM did was authenticate. It does not actually store the password information; correct?
- Correct. It stored password hashes but it did not store passwords.
- Q. And all I'm getting at is: The password was not one of the database fields that was set up in your database; correct?
- A. The database field itself is called a "password" in that schema, but it contains anywhere from a 32 to 40 bite hash.
- Q. And that 32 to 40 bite hash is not information that even you could read and know what it was; correct?
- A. I could not read it with the human eye and tell you what the password was.
 - Q. Right. That's all.

Now, you said that you had to disable for about a two-month -- or suspend for a two-month period the registration page for houseSYSTEM.

- A. Correct.
- Q. During that period if you were not a registered user of houseSYSTEM, were there any functions that you nonetheless could utilize on houseSYSTEM even though you weren't registered?
 - A. Yes.
- Q. All right. What functions?
 A. The photos that appeared for each site and the contact information for each house and the ability to search using the search box provided on the home page possibly to view photos that had been uploaded to the photo album, even though it was not heavily used, but I don't think that most of the functionality was available unless you were a registered user.
- Q. Okay. Could you still use the course function that had been originally part of CriticalMass?
 - A. No.
- All right. And you couldn't use the system that had been part of FASt?

Well, let me strike that.

Was FASt also ever integrated into houseSYSTEM?

- Yes. That was the source of this entire Α. controversy.
- Q. All right. The FASt use of email information is the same system that allowed a Harvard student to use the email system on houseSYSTEM?
- A. There was no difference between the email system I had set up freshman year which elicited no protests and the email system that I integrated to houseSYSTEM my sophomore to junior year which elicited enormous protest.
- Q. All right. And that function, I take it, was part of what was disabled?
 - A. No, that was not disabled.
 - All right. Was it modified?
- Eventually it was removed, but it was not Α. modified.

- Okay. When was it eventually removed?
- I don't recall, but at some point after Α. this article was written.

MR. COOPER: Okay.

(Whereupon, Greenspan Exhibit 4 was marked for identification.)

BY MR. COOPER:

Q. Mr. Greenspan, at some point did you -were you required -- let me strike that.

I put in front of you an email from Harvard SEC, info@harvardsec.org, to houseSYSTEM Administrator, a letter from Aaron Greenspan.

- I do. Α.
- O. Are you familiar with this email?
- Α.
- Was this email generated by you? Q.
- I wrote this email. Α.
- All right. Did you send this email to Q. anybody?
 - Α. Yes.
 - Who did you send this email to? Q.
 - Every member of houseSYSTEM. Α.
- Q. Okay. And did you send it on or about August 13th, 2003?
 - A. I sent it on August 13th, 2003.
- Q. Okay. And then when you say you sent it to "Every member," does that mean the 4- to 500 registered users that existed as of between August 1st, and August 5th, about 2003?
- A. I sent it to the approximately 4- to 500 members as of August 13th, 2003.
- Q. Did you send it to anybody else?
 A. I'm sure I showed it to my parents, but I don't believe I sent it to them.
- Q. All right. Did you show it to The Harvard Crimson?
- A. Not intentionally, but I'm fairly certain they received a copy of it.
- Q. All right. Do you have a recollection of The Harvard Crimson publishing portions of this email?
- I remember a follow-up article which may have quoted from this email, but I don't specifically remember those portions.
- Q. Okay. It says that you started CriticalMass -- it says in the very first sentence, "I started CriticalMass about a year ago to try and improve the information available to Harvard College students about courses."
 - A. That's correct.
- Q. So does that now in any way refresh your recollection as to about when you started CriticalMass?
- A. No, because it's about as precise as I what I told you before, which is I started it sometime in the fall of the semester of 2002 which would have been about a year prior to August of 2003.
- Okay. But CriticalMass had been in existence for almost one full year when you launched houseSYSTEM; correct?
 - A. That's correct.
- Okay. So can you give me an overview of what the letter is about.
 - A. Well, the letter is about the controversy

that erupted over the password issues and the college's, in my belief, unfounded request that I turn over the entire database to them so that they could assess the security risk and if necessary force students to change their passwords, which they eventually did.

There was some dispute about what they actually asked me to do. As I recall, during telephone conversations and through email, they asked me to turn over the entire database. Dean Gross and other administrators were later quoted as saying they only wanted certain fields from that database, but that is not what I recall them asking for.

- Q. The database they were requesting was the database schema that was available in Hoboken; correct?
- A. Put that way, it's not entirely correct. They were requesting the contents of one table of the houseSYSTEM database.
- Q. And that table was the table that included the hash; correct?
 - A. That is correct.
- $\ensuremath{\mathtt{Q}}.$ All right. Did you in fact turn over the hash information?
 - A. Under duress, yes.
- Q. Okay. Were you required as a result of that action to in any way modify the database?
- A. When you say "modify the database," do you mean modify the database structure or do you mean modify the database contents?
- Q. Did you continue to have a password table in the database?
- A. There never was a password table, but I continued to have a member table containing a password field.
- Q. Okay. Was that field maintained after this action?
 - A. Yes.
- $\ \mbox{Q.}$ Okay. What type of information populated it after this action?
- A. If by "action" you mean sending this email, there was no change in either the structure or the contents of that field as a result of this email.
- Q. All right. Did you change your hashing methodology in any way?
- A. Not as a direct result of this email, but as a result of some of the posts on Lowell-Open which called into question the security of the MD5 hashing algorithm.
- Q. All right. To take those in two steps. All Open, are you referring to an email list?
- A. Lowell-Open, as we've discussed, is an email list for Lowell House.
- Q. Oh, I thought you said "All Open." That's why I said --
 - A. Oh, no problem.
 - Q. And MD5 is a form of hashing; correct?
 - A. Yes.
- Q. All right. And not as a result of this controversy but for other reasons you changed the hashing methodology?
- A. Well, I mean, this controversy and those other reasons are all sort of one and the same. So, yes, I changed it because of the controversy, not

because of this particular email in Exhibit 4.

- Q. Okay. But that change did not require you to change the database field; correct?
- A. Not the name of the field. It required me to change the size of the field from 32 bytes to $40\ \text{bytes}$.
- Q. And, therefore, technically you had to change the content for all the passwords because they were now encrypted in a different method; correct?
- A. No. There was no way that I could change the contents because I didn't know what the password was to start with. So the users had to change the contents by virtue of logging on again.
- Q. Okay. But with that -- with that change, and only that change, it was essentially the same database as it was previously; correct?
 - A. Correct.
- Q. All right. And it still maintained a field that included the email address; correct?
 - A. Yes.
- Q. And that would include Harvard email addresses; correct?
 - A. Yes.
- Q. Okay. After these events, did you continue to develop houseSYSTEM?
 - A. Yes.
- Q. Are you familiar with something called "Facebook" used by the houses at Harvard?
- A. Not to be overly precise, but when you say "Facebook," I assume you're referring to the generic paper and online Facebooks that existed many years before I attended Harvard and when I attended.
- Q. That's exactly what I'm referring to. Those paper and online Facebooks are in fact pictures of students that reside in particular houses; correct?
 - A. That is correct.
- Q. And they include some other generic information about the students as well; correct?
 - A. Yes.
 - Q. Like hometown?
 - A. Yes.
- Q. Okay. But you were familiar with them as of August 2003?
- A. I was familiar with them as of probably August 2001 when I received a request to supply my own photograph for my class' freshmen Facebook.
- Q. Okay. And you were aware they were available online through each of the individual houses as well; correct?
- A. I believe every house had an online version, but I don't know if that's true.
- Q. All right. Now, is it also true that the online versions were not made available outside of the members of the house?
- A. In most cases, that is true. Some houses, like with the open lists, had different policies about security and privacy and so it was easier to access some than others.
- Q. Would you agree that as of August 2003, though, nobody had -- no website as yet had served the function of providing virtually all the Facebook information available in one site?
 - A. That is correct.
 - Q. All right. Was it a goal at any time

while you were associated with Harvard SEC to in fact unify and/or make available all Facebook information in one site?

- Yes. Α.
- Was that a goal as of August 2003? Q.
- Α.
- All right. How far in advance -- when did Q. that goal first arise, if you know?
 - A. I don't remember the exact date.
- At some point in time did you begin work on a function that would unify the Facebooks as part of houseSYSTEM?
 - Α. Yes.
 - Q. When did you begin, if you recall?
 - I don't recall. Α.
- Was it in progress as of the time that this issue about security arose involving houseSYSTEM?
- A. It may have been. I don't recall, as I said, the exact date that I thought of it.
- Q. All right. Is it you personally, you believe, that thought of this idea?
- A. I know that it is me personally.
 Q. Okay. It wasn't suggested in any way by any of the other members of SEC; Harvard SEC?
 - Α. No.

MR. COOPER: Okay.

(Whereupon, Greenspan Exhibit 5 was marked for identification.)

BY MR. COOPER:

- Q. And, Mr. Greenspan, I put in front of you a multi-page email dated Friday, August 22nd, 2003, from Lowell House Senior Tutor given the email address lo-abst@fas.harvard.edu to Aaron Greenspan.
 - Have you seen this email previously?
 - Α. Yes.
- Q. All right. And is the email address greensp@fas.harvard.edu an email address you used while you were at Harvard?
 - A. Yes.
- Do you know who the Lowell House Senior Q. Tutor is?
 - Yes. Α.
 - Q. Who was that?
 - Jay Ellison. Α.
- Do you have an understanding why he was sending you this email?
- A. Roughly that it was his job to enforce disciplinary action in Lowell House.
- Q. All right. It was his job to enforce disciplinary action?
 - A. Correct.
- Was he contemplating some sort of disciplinary action against you?
 - A. Yes.
 - What was the reason for that? Q.
- Α. The aforementioned controversy surrounding passwords.
- Did he in fact take any disciplinary Q. action?
- In the end, no. It would have been the administrative board that took disciplinary on his recommendation, I believe, but because of long emails such as these I was able to avoid the aforementioned disciplinary action.
 - Q. All right. So you weren't disciplined for

this event then?

- A. Not officially.
- Q. By that, there is a thing called the Harvard Administration Board; correct?
 - A. There is an administrative board.
- Q. And they have the power to impose sanctions on students; correct?
 - A. That is my understanding.
- Q. But you were never -- no sanction was ever imposed on you by the Harvard Administration Board; correct?
 - A. As I said, not officially.
- Q. Okay. In your personal view, was it imposed unofficially?
- A. I felt very unwelcome at Harvard after much of this transpired.
- Q. Okay. In turning to the email on page 2, there's a paragraph 5.
- First of all, it appears that within this email is an email that you had previously drafted on August 22nd, 2003, at 12:57 p.m.
 - A. That's correct.
- Q. All right. And paragraph 5, therefore, on page 2 would have been drafted by you?
 - A. Yes.
- Q. All right. First of all, in the first sentence it says, "As you know, participation in houseSYSTEM is a completely voluntary act. Any student is free to use or not use the system as is his wish."

Do you see that?

- Yes.
- Q. Would you consider, therefore, houseSYSTEM to be what is called an "opt-in" type of program?
 - A. Yes.

Α.

Q. All right. The next sentence, it says, "Regarding the Facebook specifically, it is our view that due to the fact that the feature is not yet complete, and as a result of our intended design, which would make inclusion of any piece of identifying information in the Facebook completely optional on top of houseSYSTEM'S existing voluntary nature, there would be little chance for a violation of anyone's privacy."

Do you see that?

- A. I do.
- Q. All right. Does that refresh your recollection whether you were working on the Facebook function in August of 2003?
- A. It makes it clear that I was working on it in August of 2003. It does not make it clear whether I was working on it on August 13th, 2003.
- Q. Okay. Do you know who you were referring to when you say "it is our view," the plural "our"?
- A. I was referring to the board of the Student Entrepreneurship Council, as houseSYSTEM was the SEC's project primarily.
- Q. Okay. So by -- at least by August 22nd, 2003, you had shared your idea of a unified Facebook integrated with houseSYSTEM with your other members of Harvard SEC?
- A. Yes. And apparently I had also begun working on it by then.
- Q. When you started working on this idea, did you publicize the idea that you were working on it?
 - A. I did not as a standard practice publicize

ideas that I was in the middle of. But I did often work on things with the intent of publicizing them later.

- Okay. Do you recall how many people knew that you and/or Harvard SEC were working on its Facebook system before it actually launched?
- A. Probably only those people involved with the SEC in its board would have known.
- Q. All right. Did you know how the Lowell House Senior Tutor knew; Jay?
- A. I don't remember the precise series of events, but I believe I had a long series of phone conversations and at one point a meeting with Jay Ellison in which we discussed a number of topics, many of which are addressed here.
- Q. Okay. But one of the subjects definitely was the development of a Facebook system for integration with houseSYSTEM; right?
- A. Yes, I do recall discussing that in person with Jay Ellison.
- Q. Okay. Who is Paul Bottino?
 A. Paul Bottino was the administrator of the Technology and Entrepreneurship Center at Harvard.
- Q. And was Harvard SEC in any way associated with the technology at the Entrepreneurship Center?
- A. As I mentioned before, the original name for the SEC was the TECH Student Association; "TECH" is the acronym for Technology Entrepreneurship Center at Harvard. And so by virtue of that affiliation we were affiliated with Paul Bottino.
- Q. All right. Did he have an official title with respect to Harvard SEC?
 - A. Advisor.
- Was he in any way involved in the Q. development or operation of houseSYSTEM?
 - A. No.
- He was just a faculty advisor to the Q. group?
- I don't believe he's on the faculty technically, but he was an advisor to the group.
- Q. Okay. Was he made aware while you were developing the Facebook function that you were doing so on houseSYSTEM?
- A. I don't believe so. He was only minimally involved with the group.
- Q. Do you have a recollection when the Facebook system was completed?
- A. To the best of my knowledge, it was done on or around September 19th, 2003.
- Q. Okay. And why do you have that date in mind?
- I believe there's an email that was sent out around then telling people that they could sign up for it.

MR. COOPER: Okay.

(Whereupon, Greenspan Exhibit 6 was marked for identification.)

BY MR. COOPER:

Q. Mr. Greenspan, I put in front of you Exhibit No. 6 an email dated Thursday, September 18th, 2003, from you to the SEC Management Team, team@harvardsec.org.

Do you see that?

- Yes. Α.
- First of all, who is the SEC Management Team?

- A. I listed their names earlier. They were the people in various positions of the SEC on the board.
- Q. Okay. It's the same group that you mentioned previously that had officer positions of some sort, although you couldn't recall specific titles?
 - A. Correct.
- $\mbox{Q.}$ Okay. Did you in fact generate this email?
 - A. I wrote it.
- Q. All right. It states, "Hey guys, the initial Facebook code is done for houseSYSTEM. Try testing it out and see what you think."
 - A. Correct.
- Q. All right. First of all, did anybody else create the code for -- the Facebook code other than you?
 - A. No.
- $\ensuremath{\mathtt{Q}}.$ All right. In what language was the Facebook code written?
- A. It was written in several languages; including PHP, SQL, HTML, JavaScript and CSS.
- Q. Now you say, "Try testing it out and see what you think."
 - A. Correct.
- Q. How would the SEC Management Team have access to test the code?
- A. They would have signed into houseSYSTEM, attempted to upload a photograph, attempted to type in information about themselves, and attempted to then view that information about themselves and possibly of others.
- Q. Okay. As of September 18th, 2003, the registration page was still disabled, correct, for houseSYSTEM?
- A. I don't know for sure. I think it may have been right around the time that we turned it back on.
- Q. All right. In the development phase was there a beta site that you were working with for the Facebook?
- A. No. This was all a pretty small project when it started, although it got much bigger later, and we didn't spend a lot of time creating a formalized development process, especially even that I was the only real developer.
- Q. All right. Was the code you were working on available online at any point prior to its launching?
 - A. Do you mean the source code?
 - Q. Yes.
- A. The source code was executable and rendered the website when executed, but it was not available in its raw form except on my own hard drive.
- Q. Okay. During the period in which it was being developed in its executable form, could any of the 4- to 500 registered users who could still access houseSYSTEM also use it even while it was in development?
- A. They could have used it had they known it was there, but they would not have known that it was there because I would not have put links to it until it was ready to be used.
 - Q. Okay. And by that you're saying you

hadn't developed the front end applications to permit somebody using the site to even recognize the code was being developed?

- A. That's one way of putting it.
- Q. Okay. When it was completed, what type of link did you create? Was it a hyperlink?
 - A. It was a hyperlink.
- Q. All right. And it opened up a new browser application?
 - A. It opened a web page for the Facebook.
- Q. All right. Did the Facebook run off the database as was in Hoboken?
 - A. Yes.
- Q. It used the same database schema as it related to registered users?
- A. It relied on the members' table and on additional tables.
- $\ensuremath{\mathtt{Q}}.$ Okay. What were the additional tables it relied on?
- A. That information I think is confidential. MR. COOPER: We can say under the protective order, if all counsel agree, that just this portion we'll treat as confidential and will only be known by the attorneys.

 $$\operatorname{MR}.$$ FURBUSH: Do you want to discuss this with me?

THE WITNESS: Yeah.

MR. FURBUSH: Okay. Can we take a break?
MR. COOPER: Sure. You understand if you

need a copy of the protective order, we can get it.

Do you have any objection if this portion is made confidential, attorneys' eyes only? We've done that with third parties so...

 $$\operatorname{MR}.$$ FURBUSH: Okay. Let me understand this. It's not obvious to me what the issue is so let me discuss it with Mr. Greenspan.

MR. COOPER: Okay.

THE VIDEOGRAPHER: Off the record at

11:23.

(Off the record.)

THE VIDEOGRAPHER: Back on the record at 11:31.

MR. FURBUSH: We're going to designate this portion as attorneys' eyes only.

MR. COOPER: I'm may be able to actually separate that. I'm going to try to go out of the table and then I'll tell you if I have to go back in. If you want to designate it for now, that's fine, too.

 $$\operatorname{MR}.$$ FURBUSH: Why don't we see what your questions are.

MR. COOPER: Are we on?

THE VIDEOGRAPHER: Yes.

BY MR. COOPER:

- Q. Mr. Greenspan, in your Universal -- in unifying the Facebook, tell me what information you included in houseSYSTEM.
 - A. Do you mean for specific user profiles?
 - Q. Yes.
- A. A user was allowed to upload their own personal photograph to say where they lived; on campus or off, to say what their cell phone number was, what their telephone number was on Harvard's own phone system, what their email address was, if they had something like a favorite quote.

And the number of fields associated with

the user's profile grew over time, but I believe those were the primary ones that existed as well as I believe their AIM screen names, and so a lot of people used that to communicate.

- Q. Okay. You could upload a photograph -- would it be limited only to the Facebook photograph?
 - A. Which Facebook photograph?
- Q. Okay. The Facebooks that were used in the actual houses, the online Facebooks, they included the student's photograph; correct?
 - A. Correct.
- Q. In your Facebook that you've developed you said that the student was allowed to upload their own personal photograph?
 - A. That's correct.
- Q. Was it limited only to the photograph that was available on the online Facebook or was it any student photograph they could upload?
- A. Any student photograph. And, in fact, we encouraged people to upload a non-Harvard photograph since Harvard considered itself to own the copyright to that image.
- Q. All right. Were they allowed to upload more than one photo or were they limited to one photo?
- A. For the purposes of the Facebook itself, they could upload one photo, but there was also the associated photo album feature which would allow you to upload or to link to, which is a better way of putting it, multiple photographs.
- Q. All right. And the associated photo album feature, you say it would link to it. You could have a link on your user profile?
- A. No. As I said, there really weren't user profiles and so you could upload things to the photo album which would be associated with your name. And, again, this photo album for reasons of space limitation used links rather than actual uploads, but -- so you could upload photographs to that album, but they would not be tied to your profile because there were no profiles per se for the aforementioned privacy reasons.
- Q. Okay. What information was made immediately available when you -- if I opened up a Facebook page, what would I see?
- A. You would have seen a grid of everybody on the Facebook in the similar manner to the Harvard Facebooks or the online Facebooks with all the information I mentioned before and their photographs.
- Q. All right. And by a "grid," that would mean like a row of, say, five faces that all were associated with students in one particular house and below that five more?
- A. It was a row of three and then three, and you could see everyone in every house or you could limit it to a specific house or a specific building.
- Q. Okay. But you would see their name and their photograph?
 - A. Among other pieces of information, yes.
- Q. And they could also include their telephone number?
 - A. Yes.
 - Q. And their email address?
 - A. Yes.
 - Q. And their instant message account

information?

- A. Yes.
- Q. All right. Did it include the typical information that also was associated with the Facebooks, like hometown?
- A. I don't actually recall hometown being in the Facebooks that Harvard provided. I believe it was in the freshmen Facebook but not the house Facebooks.
 - Q. How about school?
 - A. Meaning like high school?
- Q. No, no. I'm sorry. The different schools at Harvard. Like, say, the School of Engineering or Economics.
- A. Those aren't actually schools at Harvard; so no.
 - Q. Let me restate that.

There are two different issues and I want to take them... Would it permit you to list your major?

- A. I believe when you signed up for houseSYSTEM, it asked you both for your intended or current major and your future plans for employment. So I think those may have actually been listed there, yes.
- Q. Okay. And if you were in, for instance, the medical school or the law school, were you --well, first of all, was this limited only to undergraduates?
- A. No. I believe it did say if you were at the graduate school or the Kennedy School of Government or -- I'm fairly certain it said what class you were in, that kind of information about where you were in your educational career.
- Q. All right. It was contemplated this could be used by alumni, too, then?
- A. At the time I wasn't focusing on alumni, but I certainly was encouraging alumni to sign up for houseSYSTEM and all of its various components, but that wasn't my real core target.
- Q. Okay. Did it permit users outside Harvard to access this information in any way?
 - A. No.
- Q. All right. Was that because you still needed to have a Harvard email account to actually use the system?
- A. That was one reason. Another reason was I didn't want people outside of Harvard to access it.
- Q. Okay. So was there any feature that would allow prospective employers, for instance, to view the information?
- A. That would depend if prospective employers happened to be Harvard alums or not.
- Q. Is there anywhere a student could post their resume in the Facebook or anywhere else on houseSYSTEM?
 - A. Yes.
 - Q. And where was that?
 - A. Under the job section.
- Q. And the job section was a section that existed all the way from the beginning of the launch of houseSYSTEM; correct?
 - A. I don't recall exactly.
- Q. Could the student link to that on their page with their Facebook photo?
 - A. I suppose they could have if they were

clever about it, but it wasn't directly linked.

- Q. All right. Now, without telling me the specific fields, all the new information; say, the Facebook JPEG -- or the photo uploaded, the school or whatever new information you had to generate that was not previously part of the registration process. You had to create new tables for them; correct?
 - A. Yes, they did require new tables.
- Q. Okay. But they were still run off of one database; correct?
 - A. Correct.
- Q. All right. I just -- that's all I'm trying to get at.

They're not run off of multiple databases in different locales; correct?

A. Correct. All of the tables for houseSYSTEM and for Facebook were united under one database schema.

 $$\operatorname{MR}.$ COOPER: That was all I was ever trying to get at.

(Whereupon, Greenspan Exhibit 7 was marked for identification.)

BY MR. COOPER:

- Q. Mr. Greenspan, I put in front of you an email from Harvard College SEC to a variety of apparently house email accounts; correct?
 - A. Correct.
 - Q. Have you seen this email before?
 - A. Yes.
 - Q. Did you generate this email?
 - A. I wrote it.
- Q. All right. First of all, the Harvard College SEC email address, that's the email account for the student organization that ran houseSYSTEM; correct?
 - A. That's correct.
- Q. And you had access to that email account; correct?
 - A. Yes.
- Q. All right. The first entity it's sent to is Adams House, adams-schmooze@hcs.harvard.edu?
 - A. Correct.
- $\ensuremath{\text{Q.}}$ And is that the open email list for Adams House at Harvard?
 - A. Yes.
- Q. All right. The second party it's sent to is Cabot House, cabot-open@lists.hcs.harvard.edu.
 - A. Correct.
 - Q. Is that the open house for Cabot House?
 - A. Yes, it is.
- Q. All right. The third party it's sent to is Dunster House which is moose-droppings@ lists.hcs.harvard.edu. Is that the open email list for Dunster House?
 - A. Yes.
- Q. All right. And then the fourth listing is Kirkland House which is Kirkland-list@lists.hcs.harvard.edu.

Do you see that?

- A. Yes.
- Q. And is that the open house list for Kirkland House?
 - A. Yes.
- Q. All right. Then fourth is Lowell House, Lowell-open@lists.hcs.harvard.edu. That is the open email list we've previously discussed for Lowell

House?

- A. Yes.
- Q. And you were part of that list, too; correct?
- A. My personal email address was subscribed to the Lowell-Open email list.
- Q. So you would receive any emails that -- you would have actually received a copy of your own email here; correct?
- A. Both at my personal address and at the SEC's address, yes.
- Q. That's my point. You would have received it at your personal address because it went to Lowell House; correct?
 - A. Correct.
- Q. All right. And then the next house that's listed is Mather House, which is mather-open@lists.hcs.harvard.edu.

Do you see that?

- A. Yes.
- Q. Is that the Mather House-Open list?
- A. Yes.
- Q. Open email list.

The next one is Pforzheimer House, pfoho-open@lists.hcs.harvard.edu.

Do you see that?

- A. Yes.
- Q. And that's the Pforzheimer House-Open email list; correct?
 - A. Yes.
- Q. And then the next one is Quincy House which is quincy-open@lists.hcs.harvard.edu.

Do you see that?

- A. Yes.
- Q. And that's the Quincy House-Open email list; correct?
 - A. Yes.
- Q. And then Winthrop House is the final one, throptalk@lists.hcs.harvard.edu.

Do you see that?

- A. Yes.
- $\ensuremath{\mathtt{Q}}.$ And that's the Winthrop House-Open email list; correct?
 - A. Correct.
- Q. So would it be fair to say with this email you were trying to contact every single Harvard house for which you knew had an open email account list? A subscriber list?
- A. Not precisely. I knew that other houses had open lists as well, but I could not access them and so I was trying to contact every house that had an open list that I could access.
- Q. And if I wasn't clear by that, that's exactly what I was referring to. This is not a complete list of all the houses at Harvard, is it?
 - A. No.
- Q. All right. And that's because earlier you said some houses had open lists but they were exclusive to the users or the students that resided in that house and were not made available outside; correct?
 - A. That's correct.
- Q. All right. Now, the subject heading of this email is "New! The houseSYSTEM Universal Facebook."
 - A. Yes.

- All right. Is this the email you said that you recalled sending on September 19th to announce the launching of the Facebook system on houseSYSTEM?
 - A. This I believe is that email.
- All right. And you called it "The Q. Universal Facebook"?
 - A. Yes. I also called it "The Facebook."
- Q. Do you see in the first sentence you say, "Have you ever wanted to find someone in another house?"
 - Α. Yes.
- All right. How would someone using Q. the Universal Facebook find someone else in another house?
- All they would have to do is click and Α. they would see people in other houses.
- Q. Okay. That's because you had integrated virtually every house; correct?
- A. It's because, as I mentioned before, all of the houseSYSTEM sites shared a single, unified database.
- Q. When you launched the universal houseSYSTEM, did you populate it with the pictures that were available on the internal houseSYSTEM Facebooks?
- A. No. I knew that it had been tried before by another student who had received fairly severe disciplinary action for doing so.
 - Q. All right. Who was that other student?
 - A. Mark Zuckerberg.
- Q. And what was the program that you were thinking of?
- A. Facemash I believe is what he called it. Q. All right. As of September 19th, 2003, you were familiar with Facemash?
- A. I guess this is my mind confusing things in retrospect because I don't think he made that until November.

But that being said, I did know that Harvard claimed to own the copyright of those photographs. I knew that Harvard was especially sensitive about copyright and trademark issues from my experience dealing with the administration, and I thought taking such actions would be extremely unwise in light of the conversations I'd already had with Jay Ellison. And in turn, when I saw that someone else had done that, I thought it seemed like a poor idea.

- Q. Okay. But as of September 19th, 2003 then, there wasn't like a default in which the Facebook photo appeared no matter what?
- A. No. You were required to upload your own photograph.
- Q. All right. Was every student who was in a Facebook already in the database or did they have to opt in even to be listed?
 - A. Students had to opt in to be listed.
- So even though it's a universal Facebook, at this point it didn't include every student at Harvard?
- A. Correct. Nor was every student at Harvard signed up for houseSYSTEM. The meaning of the word "universal" was that it could be more than just one house.
 - All right. As of September 19th, 2003, do Q.

you have a sense of how many users you had?

- A. No. But I'm sure documents exist that could give you that number.
- Q. Okay. You referenced in the first paragraph, "How about a freshman?" Do you see that?
 - Yes.
- Was that because the freshmen Facebooks Q. were different than the house Facebooks?
- A. It was because there was no online freshmen Facebook. Period.
- Q. Okay. That's because the freshmen received theirs in hard copy; correct?
 - Α. Correct.
- All right. And it was your hope that you would be able by this application to permit the freshmen to generate online Facebooks in addition to those students who already had them as a result of being upperclassmen?
- A. That's right.
 Q. All right. And then it says, "Ever been frustrated by house website restrictions?"
 - A. Yes.
- Q. What are you referring to in "house website restrictions"?
- A. Excuse me. As mentioned previously, some websites were more restrictive with information than others, and because of that sometimes you had to be physically in a house to use its Facebook. Other times you had to have a special password. Other times you had to use your Harvard ID. Other times you could see it no matter what.
- Q. Okay. But if a student opted in, then they explicitly gave permissions to override any of the privacy issues that you just referred to; correct?
- That was my opinion, that if you chose to post information about yourself on a website that was clearly publicly available, then you effectively waived your right to privacy surrounding those pieces of information that you chose to post.
- Q. All right. In the middle paragraph it says, "The Harvard College SEC presents the newest feature on houseSYSTEM; the Facebook."

Do you see that?

- Yes.
- Okay. Do you recall on houseSYSTEM if it was presented as "The Facebook" or "The Universal Facebook"?
- A. Clearly this email displays that it was presented as both.
- Q. Okay. Do you have a recollection what title just opened up?
- A. I recall using Universal Facebook and Facebook interchangeably so I don't remember if some graphics said one thing and some pieces of text said another, but both were used.
- Q. All right. And you were the exclusive author of that code; correct?
 - A. Correct.
- Q. It says, "Now you can find exactly who you're looking for, as long as they're a houseSYSTEM member and they've opted-in."
 - A. Correct.
- All right. And that's a reflection of the Q. fact, as you stated, you first needed to register

in order to be a member of the Facebook; correct?

- A. Correct.
 Q. All right. But then it says, "And with one out of every eight Harvard College students signed up, and many new members each day, there's a good chance they have."
 - A. Correct.
- Do you have a sense -- do you, as you Q. sit here today, know what approximately "one out of every eight Harvard College students" would translate to in terms of students as of September 19, 2003?
 - 800. Α.
 - All right. And that's because --Q.
- There were 6400 students total in the undergraduate student body, and that was the number I was using when I said one out of every third --"one of every eight Harvard College students."
- Q. And as I understand it, there was some other unknown number that would have been potentially either alumni or students in the other colleges, like law school or medical school?
- A. Yes. There could have been other students in the graduate schools and alumni.
- Q. Okay. And then it says, "Start using the houseSYSTEM Facebook today! Visit your house's houseSYSTEM site, or to become a member, visit."
 - Do you see that?
 - Yes.
- And then it gives a link, Q. http://www.harvardsec.org/projects/housesystem.html.
 - A. Correct.
- Would you have sent that out if the registration page was still deactivated?
 - A. No.
- All right. Does this help refresh Q. that the page had been reactivated at least as of September 19th?
- A. Yes. It seems as though it would have been extremely foolish to send out something that no one could sign up for. The email that would make it very clear whether or not the site was up is the email from Jay Ellison saying, "You can turn on the site," but I don't know if that email is available here or not.
- Q. Okay. There was a -- Jay Ellison was an administrator?
- A. He was the Lowell House Allston Burr Senior Tutor who I corresponded with in Exhibit 5.
 - Q. Was he an upperclassman?
- No. He was a professor or an assistant Α. professor.
- Q. Okay. But at some point between the August 22nd, 2003 letter and your September 19th, 2003 letter, he gave you permission to go forward with houseSYSTEM?
 - A. Yes. After considerable negotiations.
- Q. All right. What restrictions, if any, were imposed on you?
- A. There were changes we had to make to houseSYSTEM in the form of changes to graphics, additional legal disclaimers, changes to our security statement, the change I had already made to the hashing algorithm. There were changes I had to make to Think Computer Corporation's website. Permission I had to obtain from several departments

at Harvard, permission I had to obtain from the master of each house regarding content related to their house.

There were a number of steps, many of which I thought were unnecessary and overly burdensome that we had to endure before we were allowed to let people sign up for the site again.

- Q. Why did you have to make changes to the Think Corporation's website?
- A. The way I saw it, the Harvard administration was looking for excuses to keep houseSYSTEM down because they saw it as a competitive threat to the my.harvard portal and to their newly-launched college site, which I had no knowledge of because it had not yet been launched when this was all raging.

And one of the ways they felt that they could exert control over me was through my company since Harvard has fairly Draconian regulations regarding student-run enterprises, and because Harvard was one of my clients and still is, and I had listed Harvard on my website as a client, they felt as though it would be suddenly necessary for me to obtain permission in order to use Harvard's name on that website.

- Q. That had nothing to do with the specific function of the Universal Facebook; correct?
- A. No. It had to do with houseSYSTEM, but it did not have specifically to do with the Universal Facebook. They raised other objections, as you can tell from Exhibit 5, about the Universal Facebook, but most of them were founded on misunderstandings caused by their unwillingness to listen to what I was actually telling them.
- Q. Okay. Was there a link to houseSYSTEM on the Think Corporation website?
 - A. No.
- Q. Was there something about houseSYSTEM on the Think Corporation website that they would have any reason to require a change to it?
- A. No. Their problem was that I was listing the Harvard International Review as a client.
- Q. Okay. And that was separate from houseSYSTEM all together; correct?
- A. Correct. Both Harvard University and Harvard International Review were clients, but they were apparently unaware of that and thought that I was trying to twist Harvard International Review into Harvard.
- Q. Okay. Do you know if there was a link anywhere outside of -- on the World Wide Web to houseSYSTEM that wasn't associated with the Harvard site?
 - A. I would have no way of knowing that.
- $\ensuremath{\mathtt{Q}}.$ All right. There were none that you know of?
- A. At the time there were links to CriticalMass from outside Harvard because it had been covered in The Boston Globe. I don't know if those links to CriticalMass would have then forwarded to houseSYSTEM. But it is conceivable both from those external links and from links from search engines that people outside of Harvard could have found houseSYSTEM.

And especially because students don't always reside in their dormitories and occasionally

go home for vacation, such as during August for summer vacation, that people outside of Harvard would have been exposed to and seen houseSYSTEM and its various components.

- Q. You said that CriticalMass had received press in The Boston Globe?
- A. I do recall talking to a reporter from The Boston Globe and I think I recall reading an article about it there.
- Q. Was it just -- what was the subject that was being discussed? I mean, why was CriticalMass a newsworthy item to The Globe, if you recall?
- A. CriticalMass stemmed from a very unhappy experience I had had in an economics course where I wrote a letter to the department head of the economics department at Harvard and had the professor removed from his own class. That, according to The Globe, was newsworthy. And because I made CriticalMass as a result of that, I'm fairly certain that it received some coverage. I could be wrong, but I think it did.
- Q. Someone who was using the course evaluation function or CriticalMass function on houseSYSTEM, would their name appear anonymously or would it appear under their user ID?
- A. At their option it could appear anonymously, and it was a popular feature among students who feared repercussions from professors.
- Q. In Exhibit 7 there, the final paragraph says, "Don't forget you can also buy and sell textbooks and other items, review courses, and trade DVDs all on houseSYSTEM -- and it's completely free."
 - A. Correct.
- Q. All right. Those are the functions that already existed as of August 1st, 2000 -- those are amongst the functions that already existed as of August 1st, 2003; correct?
 - A. Yes.
- Q. All right. And then it says, "Keep an eye open for the next feature: The houseSYSTEM Jobs center."
 - A. Yes.
- $\ensuremath{\mathtt{Q}}.$ Okay. What was the houseSYSTEM Jobs center?
- A. As mentioned earlier, it was a place where you could upload your resume as a student or post job openings as an alum.
- Q. When I asked earlier I guess I wasn't clear. As of the time of the launch of the Facebook, that function didn't exist?
 - A. Apparently not.
- Q. Okay. Did it exist sometime shortly thereafter, if you know?
- A. I assume it existed shortly thereafter September 19th -- or shortly after September 19th, I should say.
- Q. Okay. Do you recall it launching before the end of 2003?
 - A. Oh, absolutely.
- Q. Okay. In Exhibit 7 were you aware of how many students had in any way subscribed to any of the houses other than Lowell House on the open email list?
 - A. So you're asking how many people were on

each house email list?

- Q. Did you have an understanding of approximately how many you were reaching?
 - A. Total by sending to all of the lists?
 - Q. Yes.
- A. This is a very approximate guess, but I would estimate between 4- and 5,000 students.
- $\ensuremath{\mathtt{Q}}.$ All right. And why do you make that estimate?
- A. I would say that of each house, probably half of the houses subscribed to the open list. However, people talk to each other and they send emails to one another and if one student saw something on the open list and his roommate or her roommate was not on that list, they could still forward it. And so I think that probably if you were to send an email to every or almost every house list, you would certainly reach several thousand students.
- Q. All right. As of September 19th, 2003, were you familiar personally with Mark Zuckerberg?
- A. I believe I had seen on the Lowell-Open house list an email from one of his friends regarding his CourseMatch system which surprised me because of its similarity to CriticalMass. I sent him an email asking him if he'd be interested in talking, I think, because of that CourseMatch system, but I never got a response, to the best of my knowledge.

MR. COOPER: By the way, before I mark it, were you comfortable about there was no need for the attorney -- all right.

I'll mark as Exhibit 8 (indicating). (Whereupon, Greenspan Exhibit 8 was marked for identification.)

- BY MR. COOPER:
- Q. Mr. Greenspan, you said that you became familiar with Mr. Zuckerberg because of CourseMatch; is that correct?
 - A. That is correct.
- Q. All right. And before then you had not heard or knew -- not heard of him or knew him, to the best of your knowledge?
- A. I might have passed him once in Harvard Yard, but I did not know him.
- Q. Okay. I just put in front of you a September 18th, 2003 email from you to Mark Zuckerberg.

Do you see this?

- A. Yes.
- Q. And you said that you had been shown a link by somebody at Lowell House to CourseMatch; correct?
- A. An email was sent over the Lowell-Open mailing list. I was not personally shown anything really.
- Q. And did you then send this email to Mark shortly after being shown the email or seeing the email about CourseMatch?
 - A. It appears that way, yes.
- Q. All right. As you sit here today, do you recall how CourseMatch operated?
- A. I remember the site as doing something that I considered but I decided not to do for privacy reasons. Again, which was that you could make a list of everybody taking a particular course,

which the official course sites did not allow you to do, and I did have that capability through houseSYSTEM; and, in fact, it was quite easy to do from a database programming perspective. But I once again was weary of upsetting some of the oversensitive people in the Harvard community.

- $\ensuremath{\text{Q}}.$ In the email you sent him you say "Neat site."
 - A. Yes.
- Q. Is that -- was that sincere? Did you like Mark's site, coursematch.com?
- A. "Neat" and "like" are different words. And I was sincere in thinking that this site represented a good idea, and as I mentioned, it was an idea I had thought of previously. But I would not say that I liked it because, of course, I was attached to my own creation, and what I liked was the idea that there was someone else out there capable of both having and executing those kinds of ideas.
- Q. Okay. Coursematch.com, it required a Harvard email address to sign up; correct?
 - A. I don't remember.
- Q. All right. It was devoted to Harvard courses, though; correct?
- A. I assume so. I don't really remember much of that website except that it was black and red.
- Q. Okay. And that it matched courses with interests; correct?
 - A. Something like that.
- Q. All right. In your email you said, "It's pretty similar to what we've been working on with houseSYSTEM. I don't know if you've seen it yet."

 Do you see that?
 - A. I do.
- Q. And then it states -- then you give a link, http://www.kirkland.harvardsec.org.

Do you see that?

- A. That's correct.
- Q. All right. By the inclusion of Kirkland, is that a reference to Kirkland House?
 - A. Yes.
- Q. All right. Did the harvardsec.org have the ability to identify the members by their houses in addition to administration?
- A. The theoretical ability was there based on the originating host name or IP address of the user, but we were not taking advantage of that. I simply looked up where Mark lived and sent them an appropriate link.
- Q. Do you know if you got a response back from this email?
- A. As I mentioned earlier, I don't believe I did.

MR. COOPER: Okay. I'll give you the option. It's 12:05 right now. If you'd like to take a break for lunch. One thing that might facilitate is right after lunch I can then have that set up (indicating) so we can get it out of the way and just move on.

THE WITNESS: And then come back to the documents?

MR. COOPER: Yes.

THE WITNESS: Okay. It's fine with me. I don't really care either way.

MR. COOPER: All right. I think that

might work best for everybody.

THE VIDEOGRAPHER: Off the record at

12:05.

(Whereupon, lunch recess was taken from 12:05 p.m. to 1:15 p.m.)

THE VIDEOGRAPHER: Back on the record at

1:15.

BY MR. COOPER:

- Q. Mr. Greenspan, earlier in the depo today I indicated or I showed you a copy of the subpoena that we had served on you; correct?
 - A. Correct.
- Q. And one of the things that we had requested was a demonstration of houseSYSTEM, paragraph 11.

Do you see that? This is Exhibit 1.

- Yes.
- All right. As you sit here today, do you still have the code that you used to develop houseSYSTEM?
- A. I still possess it through Think Computer's ownership of it, yes.
- Q. All right. Think Computer ownership at some point at a later date took ownership of the houseSYSTEM; correct?
 - A. Yes.
- Q. And "later date," I'm talking about a later date than September 19th, 2003.
 - A. Yes.
- All right. And does Think Computer also Q. have possession of the database that was used with houseSYSTEM?
 - A. Yes.
 - Q. All right. And that's the SQL database?
 - Α. Correct.
- All right. Does Think Computer operate a Q. website?
 - Yes. Α.
- And Think Computer is still in existence; Q. correct?
 - Α. Yes.
 - And you're still the CEO; correct? Q.
 - Yes. Α.
- All right. Does the website that Think Q. Computer operates have the ability to link with the code that was in fact the code you developed for houseSYSTEM?
- A. Technically it does.
 Q. All right. In complying with paragraph 11, the demonstration of houseSYSTEM, are you prepared today to make such a demonstration?
 - I am.
- All right. Will it be a demonstration of houseSYSTEM showing the system as it existed as of September 19th, 2003?
- A. No. It will be a demonstration as it existed as of somewhere around May of 2004.
- Q. Are you able to discern where in showing us the demonstration changes -- what functions existed in it that also existed prior to February 4th, 2004?
- Α. I can do my best to point out those changes.
- Okay. Are you able to comfortably state today that you have firsthand knowledge of what the design of houseSYSTEM was between September 19th,

2003 and May 2004?

- A. I'm comfortable saying that my knowledge is better than anyone else's but that my memory is not perfect, nonetheless.
- Q. Okay. Do you believe the demonstration you give today will nonetheless give us a relatively accurate view of what the system looked and operated like in 2003?
 - Α. Yes.
- Q. Okay. Did you keep the code in the regular course of your business as Think Computer?
 - Yes.
- Q. All right. And was it the practice of Think Computer to make records like the computer code that we'll be seeing?
 - A. Yes.
- Q. All right. And you're a custodian of that code; correct?
 - A. Correct.
- All right. Now, you are prepared today to link to Think Computer to give us the demonstration of houseSYSTEM?
- A. I don't think I would phrase it that way, but I am prepared to give a demonstration of houseSYSTEM.
- Q. How are you -- what are you going to be showing us? That's all I'm asking for.
- A. I will show you a website which is at a different address than the initial website, since it's no longer possible to use that address that was used in 2003 and 2004.
 - Q. And that's the harvardsec.org address?
- Yes. That domain is no longer something I Α. have control over. And I will --

THE VIDEOGRAPHER: I'm only shooting the screen right now.

MR. COOPER: That's fine. It's still being transcribed.

THE WITNESS: So I will show you the same website as it existed before only at a different address. It is maintained by Think Computer but it is not necessarily linked to by Think Computer. BY MR. COOPER:

- Q. Okay. Can you call up the user interface for the houseSYSTEM for us to see as of right now?
- A. Yes, I am. Would you like me to right now, or no?
 - Yes. Please. Q.

You understand as of this moment we're only transcribing your words because the camera is focused on the demonstration.

- A. I do understand that.
- Q. Okay.
- The first thing I should point out is that because the configuration of the server has changed and because the domain names are now different, the site randomizes which house it chooses every time you visit it. This time it has chosen Cabot House at random, but if could have chosen any other one. And if I were to exit the browser and go back in, it might choose a different one, but it's just for demonstration purposes.
- Q. Okay. But in 2003 when the houseSYSTEM was operating at Harvard, if you lived in Pforzheimer House, you would call up your house;

correct?

- That's correct. Α.
- So your default would be the house you Q. resided in?
 - Yes. Α.

MR. WALLERSTEIN: Can you say what you typed into the address?

THE WITNESS: Just now or in 2003?

MR. WALLERSTEIN: Just now.

THE WITNESS: I typed:

housesystem.thinkcomputer.com.

BY MR. COOPER:

- Q. All right. Now, we're looking at a user interface that has the label "Cabot House"?
 - A. Correct.
- Is this a true and accurate representation of what your user interface looked like in or about September 19, 2003 for houseSYSTEM?
 - A. Yes.
- Q. It has a sign-in registration for email. A. It has a sign-in link for students for alumni and for faculty & staff.
- Q. The sign-in has -- I see in the upper right hand a sign-in that gives an email form.
- A. There is a form that asks for an email address and a password.
 - Q. Was that in existence in 2003?
 - Yes. Α.
- Q. All right. Was the email account that you would give your Harvard email account typically?
 - A. Typically.
- And the password would be your FAS Q. password?
- A. Before that was changed to overt the dispute over the FASt webmail system, yes.
- Q. All right. Did it always have the three links for students, alumni, faculty & staff that appear below that?
 - A. No.
 - Q. All right. When was that feature added? A. I don't recall.
- Did it always have the statement, "This Q. connection is not secure"?
 - A. No.
 - Q. Do you know when that was added?
- Α. Shortly after the controversy surrounding password issues.
- Q. Now, it called up an image of Cabot House at Harvard; correct?
 - A. Yes.
- All right. Was that a feature that existed when this site originally launched?
 - A. Yes.
- And there's a trademark "houseSYSTEM" at Q. the top with what -- from my distance, looks like the Harvard possibly shield?
- A. Yes. It is the logo for the SEC, actually.
- Okay. And that branding existed on houseSYSTEM from the beginning?
 - A. Yes.
- Q. Okay. From this site what would a user -what is the earliest site that you -- what is the earliest time you remember that faculty and staff were permitted to sign in?
 - A. As I said, I don't recall.

- Q. All right. Do you have a recollection when the earliest time was that alumni could sign in?
- I believe that that feature was created simultaneous with the Jobs feature. I don't know when the Jobs feature went online without referring to documents, but I would guess that it was about the same time.
- Q. Okay. And earlier this morning you testified that the Jobs feature went online sometime after September 19th, 2003, but before January 1st, 2004?
 - That's correct.
- Q. Okay. So whenever the alumni feature appeared, it was sometime in 2003, after September 19th?
 - To the best of my knowledge, yes.
- Q. Now, in the search -- and there's a search box, a search tool on the front.
 - A. Yes.
- Is that the search tool that you referred Q. to in your earlier documents that permitted you to use Google?
- A. Yes, it is. And I can demonstrate that pretty easily, I think.

There are several features within this box to search the HSN Unofficial Guide, a Google search of Harvard, an Inktomi search of Harvard, the FAS Name Directory, the FAS E-mail Directory and all of Google.

- Were all six of those search options Q. permitted as of September 19th, 2003?
 - A. Yes.
- All right. So a user could search both Q. internally within the university and externally?
- A. Correct. Q. If you go down, it says, "House resources shuttles to." What is that?
- A. Cabot House was located in what is known as the Quad, which is far from Harvard Yard for students to walk on foot, and so there were shuttles going back and forth constantly to various locations at Harvard which are listed here. And this for some reason isn't working perfectly, but it used to display the shuttle times.
- Q. And that feature existed in or about September 19th, 2003?
 - A. I believe so, yes.
- Q. All right. And then you have, "For all Visitors" some information resources about Cabot House?
 - Α. Correct.
 - Q. And then "Administration," what is that?
- I believe that is the feature that -- what you see, the contact information for people who ran that house.
 - Q. Would that be like a resident advisor?
- That would be one example of an administrator.

I believe this should still work if I click on it. So you can see these are of course out of date now, but you can get in touch with these various people because their names are hyperlinked to their email addresses.

Q. Okay. And you had that for all houses that were available on the system?

- Correct.
- All right. Going back. When it says "About Cabot House" what type of information was made available?
- A. It's a summary of the house's history and unique features about the house as well as a picture for each house, as well as a copyright attribution at the bottom.

The laptop doesn't seem to be cooperating right now. There you go (indicating).

- Q. Okay. This says, "Last Updated September 24, 2003."
 - A. That is what it says.
- So to the best of your recollection, this Q. is actually a web page that was last changed on or about September 24th, 2003?
- A. Correct.
 Q. Okay. Going back and going back yet again, you have "Rules" for all visitors.
- A. This is a page that never actually worked, I believe, but it was intended to be updated at some point in the future.
- Q. All right. What was it originally intended to do?
- A. I was hoping that the reaction from the house administrators would be less severe and that they'd be willing to actually put useful information up on here, but that never actually happened.
- Q. And would that be like administrative rules for the university?
 - A. Sure.
- Q. All right. In order to keep people out of trouble, I assume?
- A. More or less.
 Q. And that was not ever enabled?
 A. No. Because it required the cooperation A. of the university.
- Q. Okay. And the university wouldn't permit you to post that information?
- A. I don't know if they would have or not, but they did not cooperate.
- Q. Okay. Going back -- going to "Parties/ Alcohol."
- A. That would be the same kind of situation, I believe.
- Q. Was it originally intended that you would have the ability to notify students of where parties were occurring on campus?
- A. Yes. In conjunction with the calendar which is also on the home page.
- Q. Okay. So it was intended to give the students an opportunity to know of social events involving parties or alcohol?
- A. This was intended to be an adjunct to the Rules section because there are a number of rules for each house regarding parties and alcohol.

The more direct answer to your question -- oops -- is that under the Calendar here (indicating), you could submit an event, such as a party, although at this point should I log in? Because this is one of those features that requires a login.

- Q. All right. So as I understand it, we are looking in the Calendar feature of houseSYSTEM?
 - A. Correct.
 - And this was another one of the features Q.

that existed even as it launched in August 1st, 2003; correct?

- Yes. The calendar was always there. Α. So I'm going to log in at this point.
- You don't need to tell us your email or address, but can you generally say how you are logging in?
- A. I am entering my email address into the email field and I'm entering a password into the password field and then I'm clicking "Go."
- Q. Okay. A. So this is taking us directly to the $% \left\{ 1,2,...,2,...\right\}$ Calendar page which I asked for before.
- Q. Okay.

 A. I believe there is a category for "Parties" here under the category field on the Calendar page. So if you wanted to post just to your house or to all houseSYSTEM sites that you were having a party and that it may or may not be sponsored by any one of these organizations, then you could do that using this form.
 - Q. How did you get the organizations list?
- I found it somewhere and created an SQL query and entered it into the database.
- Q. All right. How many organizations did you have listed?
 - A. I believe there are 303.
- And are they all Harvard organizations or Q. are there some that are non-Harvard related?
- A. These are, to the best of my knowledge, all Harvard-related organizations.
- Q. So they would include, say, something like -- well, you have a category as "Youth at Harvard Against Handgun Violence, " that would be a student organization?
 - A. Yes.
- Okay. And then going back to the Q. categories, how did you come up with those fields?
 - A. I thought of them.
- All right. So these were just your own development of what might be useful information for students?
 - A. Correct.
- Q. And they included both academic and leisure; correct?
- Correct. There are some social and some academic parts.
- Q. And you broke even the social and academic parts into individual categories of their own, like party and leisure; correct?
- A. Correct. As I said earlier, part of the intent of houseSYSTEM was to foster a better sense of community within the houses, which I thought was something that Larry Summers had expressed a desire for and which I saw a need for myself.
- Q. Were you trying to develop a social community?
- That's another way of saying what I just Α. said, I believe.
- Q. Okay. The Description field, what was the purpose of that?
- A. The Description field would appear elsewhere on this site as the main heading for that event. So if I were going to throw a party or, for example, put on a recruiting event for a company, I'm not sure if this field would have anything in

it for a sponsor, but I might say "Think Computer Recruiting Event" as a description.

- $\ \mbox{Q.} \ \ \mbox{And then the "Date" would be the date of the event?}$
- A. That's correct. And you could choose a date from a calendar. Well, maybe one that hasn't already happened.
- Q. All right. And then the "Time" would be the time of the event?
- A. Correct. So this could be any kind of text entry, such as 12:00 p.m.
- Q. And then you have a "Harvard Map" location. Was that a feature to show where the event was occurring?
 - A. Yes.
- Q. You have a number of addresses listed that are prominent within Cambridge?
- A. This is every location at Harvard according to the Harvard map.
- Q. Okay. Was the Harvard map a map that was made available to students through the general site?
 - A. It is a publicly-available website.
- Q. But there's something that's common called "The Harvard Map" by Harvard students; correct?
- A. I don't know if most students even knew it existed, but I found it and took advantage of the information it provided.
- Q. All right. And the information it provided is provided by the university itself on its own website; correct?
 - A. Correct.
- Q. Okay. Going to "Location," you would type in the same thing as in on the Harvard map or would you type something else?
- A. I was afraid that if you were going to have something off of campus, you might not find it in the Harvard map and so I provided a text field so that you could type something else, like Atherton, California.
- Q. All right. So if there was going to be a function for a sorority at a restaurant in the north end, you could point to that as well, correct, the north end of Boston?
 - A. Correct.
 - Q. "Website," what is the website function?
- A. If there was a website devoted to that event in particular, then you could type it in. So if I had -- this page doesn't actually exist, but if I had a recruiting page for Harvard students, then I might type that in.
- Q. Okay. And then the "Memo," would that be a description of the event?
- A. Yeah. That would be a more thorough description than the actual description mentioned earlier.
- Q. Okay. And then it says, "To upload a poster for your event choose a JPEG file on your hard drive."
- A. Correct. Which I don't believe is actually working anymore, but if you did have a poster that you created to advertise the event, one of the advantages of houseSYSTEM over the traditional method of postering was that you could put it up digitally, not have to wake up 6:30 in the morning when it was 32 degrees outside, and you could broadcast it to a much wider audience.

- All right. Were there any restrictions on what type of poster could be used to advertise an event?
 - A. None that I enforced in particular.
- Q. All right. So it could be any JPEG image that was associated with the event?
 - A. Correct.
- All right. Do you know if students Q. actually used the function of uploading JPEGs for calendar events on or after August 1st, 2003 on houseSYSTEM?
 - A. They did.
- Q. All right. And did they do that before the end of 2003?
- A. The easiest way to check is for me to show you that section, which I can do if you would like.
- Q. Before you go. I just want to know: The poster function, that would be where the JPEG was uploaded?
- Yes. By clicking the browse button you Α. can find a JPEG file on your hard drive.
- Q. All right. So you'd go to your own local system, upload it and then it would be uploaded to your system?
 - A. Yes. Where "your system" means my server.
- Q. Thank you. It would be uploaded to the server operated out of Hoboken that ran the houseSYSTEM'S website?
 - A. Correct.
- All right. And you could save that information and it would be made available to other students?
 - Correct. Α.
- I believe this is working now. But if I click "Save," then you should get -- a strange error message. But once upon a time it did work. I guess this isn't a valid URL. It's smarter than I know.
- Q. You said that you could show us how to upload -- or there was someplace where that permitted the JPEGs uploaded?
- A. Yes. So before this deposition I uploaded a sample poster to demonstrate that kind of functionality. The laptop is again doing its own thing, I think.
- If you go back to the home page, you can see that on the calendar there should now be two events; there's the Facebook deposition and there's the Think Computer recruiting event, which I just typed in.
 - Q.
- And it had an RSVP function?
 It had an automatic RSVP function which, to my knowledge, is something that I invented.
- Q. All right. Did a student get to see who else had RSVPed?
- A. Yes. So by clicking "RSVP" here, it says, "You have successfully been added to the RSVP list for this event." It shows you the information I typed in last night for this event, and it also shows you a thumbnail of the poster I uploaded, which says this is a JPEG, the kind of poster a Harvard student might make. Ask then you can see the RSVP list below which also links to my email address.
 - Okay. Now, going back outside this. Q.
 - Do you mean going back to the home page? Α.
 - Yes. I'm sorry. Unless there's any other Q.

function on that that you wanted to show us.

- A. No. That's the basic gist of the calendar/RSVP/poster features which are all integrated.
- ${\tt Q.}$ All right. Now, there's an "Around Campus Find Summer Housing" function.
- A. This is something I added toward the end of houseSYSTEM'S life where a lot of people on the open lists were trying to find summer housing, having a difficult time doing it, and I thought that rather than restricting information by house, which was typical at Harvard, it would make more sense to use an integrated message board where you could post things that everybody could see rather than only some people.
- Q. That was added sometime towards the end of houseSYSTEM at Harvard?
- A. Yes. It was added right before the summer when people would have been looking for summer housing.
- Q. So would it be fair to say spring semester 2004?
 - A. Yes.
- Q. Now, below it you have a Facebook deposition at ad club?
- A. This is an automatic query based on the fact that I uploaded a poster recently. So the most recent posters to be uploaded would have been displayed on the home page so that they were prominently visible.
- Q. Would they be displayed to all students using the houseSYSTEM?
- A. I believe that depending upon the choice that you made at the outset about where to display the event, yes or no.
- Q. Okay. Now you have "General Resources, Choose a Resource."
 - A. Correct.
- Q. Before we move on, are you able to pull up any calendar events that were actually created by houseSYSTEM users in 2003?
- A. Oops. That was bound to happen. I'm referring to the water spilling, not the answer to your question.

I believe I can.

- $\ensuremath{\text{Q.}}$ Can you do so for us, please, if it's possible.
- A. I'll make an attempt. I'm not sure if this is going to work or not.

This is one for the Mission Hill After School Program on February 22nd, 2004 (indicating). This is one for the SEC itself (indicating). This is one for the SEC as well (indicating).

- Q. And it's March 5th, 2004?
- A. Correct. This is the Social Enterprise Club which was the other SEC on campus (indicating).
- Q. The second one you showed I believe had an October 13th, 2003 date. Can you go back to that. October 17th, 2003.
 - A. Correct.
- Q. So that would be an example of one that was available in the fall of 2003?
 - A. Yes.
- $\ensuremath{\mathtt{Q}}.$ Okay. If you could go back to the home page.

Now, a function you warned us that is

different now is it randomizes the picture of the house.

- There are two separate randomization events going on. One of them is that when you first go to the site, it randomizes which house it will supply to you throughout your session on the site. The randomization of the pictures is a feature which is the same now as it was then.
- Q. All right. So if I were a member of Cabot House in October of 2003, the fact that it changed from an external view of the house to this view of the internal cathedral actually might have happened then?
- A. Not necessarily with these same two pictures. But, yes, you would have seen a randomized set of pictures for that house in 2003.
- Q. Okay. Going down to "General Resources" again. You have a "Choose a Resource" function and, for instance, it includes "Academic Calendar" and "Athletics."
- A. Correct. Q. All right. What are these resources and what were their functions in 2003?
- A. Because Harvard is a decentralized organization, many of the websites that students rely on on a daily basis which are officially run are in widely disbursed locations that are hard to find. And so this makes it -- for students in 2003 it made it easier to find those resources that they might want to use, such as the academic calendar, the dining hall menu, et cetera.
- Q. It also included, for instance, a link to The Crimson?
- A. The Crimson is one of many resources that Harvard students use on a daily basis.
- Q. And so it would link to the online version of The Crimson?
 - A. Yes.
- Q. All right. Were all those general resources available in or about October 1st, 2003?
 - A. Yes.
- Q. Returning to the home page. You have "For houseSYSTEM Members Only" -- well, going back "For All Visitors," we never got to "Newsletter"?
- A. I was hoping, once again, that houses would use these resources on a regular basis. I don't think the newsletter ever really took off.
- Q. Okay. Was the newsletter devoted to houseSYSTEM or some other type of newsletter?
- A. I was hoping that the house official newsletters could be distributed.
- Q. Okay. But each house at Harvard has its own newsletter that's distributed to its own students; correct?
 - Possibly. Α.
 - Q. All right. Some houses have?
 - Α. Yes.
- Q. And you were hoping that those could be posted online as part of this resource?
 - A. Yes.
- Q. All right. If you go to the top right-hand corner of your opening page, the web page.
 - Α. The top right-hand corner?
- Yes. It seemed to change when you logged Q. in.

- These links became available when you log in (indicating) as well as these links at the top (indicating).
- Q. Did those links always become available or were they added later?

Let me strike that because that doesn't give you a time.

In or about October 1st, 2003, which of those links existed?

- A. In October 2003 had I logged in using this exact same account, all of those links would have existed.

 - Q. All right.
 A. I believe anyway.
- Q. The icons changed, too, above it. Account, " "Mission Control" and "Signout"?
 A. Correct.

 - Q. Now, I assume "Signout" existed in 2003?
 - Yes. It's a core feature of the site. Α.
 - Q. And "My Account" existed in 2003?
 - Yes. Α.
 - Q. "Mission Control," what is that?
- That's my administrative area to run Α. the site which no one else would have seen except possibly the one other person I mentioned who might have had administrative access.
- Q. All right. Now, your name, "Aaron Greenspan, " "New, " "Total, " appeared as the new icon.
 - This table did appear (indicating).
 - Q. All right. And so did the icons below it?
 - Correct. Α.
- Q. Were those features that would be presented to students in 2003?
 - A. Yes.
 - Q. And that would include email?
 - Yes. Α.
- Q. And "Packages" is the function that we talked about that was never enabled?
 - A. Yes.
- And "FaceNet," is that a later name for Ο. Facebook?
 - A. Yes.
- Q. So that there's lack of confusion, I understand your documents refer sometimes to "the Facebook" and "the houseSYSTEM." The houses also have their own Facebooks. For this deposition can we from now on refer to yours as the "Universal Facebook" so there's no confusion in the record?

 A. For that purpose, yes.

 Q. Okay. And I understand you testified
- earlier it sometimes also was called "The Facebook."
 - A. Correct.
- All right. But FaceNet, is that the same Q. thing as the Universal Facebook?
 - A. It's related.
- All right. Can you show us the Universal Q. Facebook function?
- A. Yes. I can try to show you as close to what existed in 2003 as possible because that code did change considerably over time.
- Q. Okay. Can you show us as close as possible and tell us what changes occurred over time functionally.
 - A. Sure. This may or may not work. So this is a pretty decent representation

of what the original Facebook looked like (indicating). You can see there are three across cells for people's information. Sometimes photographs would not upload correctly and so you would get this "Corrupt Photograph" message. Some people chose not to upload a photograph.

This is actually just a demo account. But this is an actual student who did not have a photograph or type in any valid information possibly.

As I said, there were privacy concerns. And there's --

- Q. Could you stop and go back up slightly. Do you see Lauren Broughton?
 - A. Yes.
- All right. Earlier I was asking what Q. additional information the students could upload to include with their photos, and I recall you said you did think address could be included?
 - Yes. Α.
- All right. But it looks like the addresses that are contemplated would be the student address or could it also include their hometown?
- A. I don't believe there was a hometown field.
 - But there was an address field? Q.
 - Yes. For their address on campus. Α.
- All right. And there is also a class Q. field?
 - Correct. Α.
- And we talked about if you could list your Q. major; it appears that you can.
 - Α. Yes.
- And Miss Broughton has an engineering Q. sciences listed.

And you said that phone numbers were permitted and Miss Broughton has an example; correct?

- Α. Yes.
- And next to her, Alton Buland has a mobile Q. telephone permitted?
 - A. Correct.
- And then her email account is listed, including her Harvard email account?
 - A. Correct.
- Now, there's a list -- there's an indication there for "Future Plans." Was that a field that any student could always fill in?
 - A. Yes, but it was not required.
- All right. But was it there from the Q. beginning?
 - Α. Yes.
- All right. Because several of the students on the page you're just showing us now have future plans.
- A. It was on the sign-up page, as I recall, from the beginning.
- Q. All right. And below Miss Broughton, Rodica Buzescu also has her AOL Instant Message address also made available.
- A. Correct. Q. And that was again a field that was optional for any student?
 - Yes.
- All right. And then below Miss Broughton you have a quote, "If you are single there is always

one thing you should take out with you on a Saturday night...your friends. Carrie Bradshaw."

Do you see that?

- A. Yes.
- Q. All right. Was the quote field again an available field made available to every student?
 - A. Yes.
 - Q. All right. Was it character limited?
 - A. Not to my knowledge.
 - Q. All right.
- A. Well, let me clarify that. It wasn't character limited by anything that I wrote into the code. The database itself may have limited it to a certain number of characters.
- Q. Okay. And as is evident from these photos and as you said earlier, the students were encouraged to upload photos other than their official Facebook photo; correct?
 - A. Correct.
- Q. You were going down. I didn't mean to stop you. I just wanted -- Miss Broughton had some exemplary fields we hadn't discussed earlier so...
- A. Okay. So continuing down you can see that there were several people who signed up for the Facebook.
- Q. Do you know approximately when this snapshot was taken?
- A. This isn't a snapshot so this is being read from the database in real time. It is consistent with the database as of, as I said, May 2004, just about -- using the same formatting that existed in May 2003 -- I'm sorry -- in October 2003.

There is one exception which I'd like to point out, which is that at the top this is missing (indicating) because this Facebook key is no longer in existence and part of the code. And also, there's no header for the same reason. And I believe that the header that would have shown up there at the time is this -- well, not that. Well, I'm not sure where it is, but there was a Facebook graphic there.

 $$\operatorname{MR}.$ COOPER: Can we go off the record for one second?

THE VIDEOGRAPHER: Off the record at 1:53. (Off the record.)

THE VIDEOGRAPHER: This marks the end of

tape 2 in the deposition of Aaron Greenspan.

Off the record at 1:54.

(Off the record.)

 $$\operatorname{THE}\ \operatorname{VIDEOGRAPHER}\colon$$ This marks the beginning of tape 3 in the deposition of Aaron Greenspan.

On the record at 2:02.

BY MR. COOPER:

- Q. Mr. Greenspan, right before the break you said there was a Facebook graphic there and you were referring to the graphic in front of us right now. It has now added a Universal Facebook graphic, has it not?
- A. Yes. I was able to repair the broken code that prevented it from showing up so that is how it looked in 2003.
- Q. So in 2003, the current -- taking away the properties, in 2003 below "Cabot House" a user would see Universal Facebook as a title and then you would

see that Facebook; correct?

- A. Currently it says "Limit To None" so right now it's not restricting which Facebook you see. But you would see the Facebook for effectively all houses in Harvard Yard.
 - Q. Currently you see all houses; correct?
- A. Correct.
 Q. If you put on, for instance, Pforzheimer, would that would be one of the houses that you could call up?
- Yes. Again, it may or may not work now, Α. but that was the idea. And it did work then.
 - Q. All right. Does it appear to work now?
- I don't think so because actually the Α. domain name, as I mentioned, no longer exists.
- Q. Okay. Two questions: When you signed in initially into the web page and you entered an email address, could it be any email address that you registered with?
 - A. No.
- All right. So if I had an AOL address, I Q. wouldn't be able to use that to register?
- A. Correct. Q. Was it effectively limited to harvard.edu addresses?
 - Yes. Α.
- Q. Okay. Now, when you clicked on -- we saw someone who had listed her AIM Instant Message account. If you clicked on that, what would you receive?
- A. First, let me clarify my last answer. Yes, for students. Alumni and faculty were treated differently.
- Q. In what way could alumni and faculty log in differently?
- A. Alumni needed a post.harvard.edu address but not necessarily a fas.harvard.edu address.
- Q. All right. And that's because Harvard's email server had set up different email fields for alumni and students; correct?
 - A. Yes.
- Q. But they are both ultimately harvard.edu addresses?
- A. Yes. Faculty I believe could use any address so long as they could verify that they were actually a faculty.
- Q. So if I were a Professor of History and you verified that I in fact was using the system, I could use AOL in that unique context?
- A. I'm not exactly sure. We wrote some sort of algorithm to verify identity, but that is possibly a true statement.
- Q. Was verification typically done just by -- somebody on Harvard SEC actually knew the professor and knew that the address was accurate?
- A. That may have been the case sometimes. We didn't have a ton of professor participation so I don't think it came up that often.
- Q. Okay. Now, again, I was asking if you clicked on somebody's, for instance, instant AOL Instant Message address or account name, what would happen?
- If you look at the hyperlink, which I can't point to with the mouse without actually losing it, on the bottom of the screen it says, "AIM: Go IM? Screen name = the user screen name &

message = Hi, I found you on houseSYSTEM. Are you
there?"

So effectively what that would do is bring up a window in AOL Instant Messenger that would send that person a message saying, "Hi, I found you on houseSYSTEM. Are you there?" as soon as they pressed "Enter."

- Q. Did you have that capacity for other instant message services, like Yahoo?
 - A. No.
- $\ensuremath{\mathtt{Q}}.$ All right. Was it limited strictly to AOL?
 - A. Yes.
- Q. Okay. In this case are you familiar with an individual named Cameron Winklevoss?
 - A. In the context of this case, yes.
- Q. Are you familiar with someone named Tyler Winklevoss?
- A. Once again, in the context of this case, yes.
- Q. Are you familiar with someone named Divya Narendra?
 - A. Under the same limited scope, yes.
- Q. All right. When you were at Harvard, were you ever familiar with a website called Harvard Connection?
 - A. Not by that name, no.
- Q. Were you ever familiar with a website called ConnectU?
 - A. Yes.
 - Q. www.connectu.com?
 - A. Yes.
- Q. All right. When did you first become familiar with connectu.com?
 - A. May 2004.
 - Q. Okay. On or about the time it launched?
 - A. Yes.
- Q. What similarities between your Universal Facebook and the ConnectU website as it launched in May 2004 are you aware of, if any, as you sit here today?
 - A. Several.
- Q. All right. Can you show us some of those similarities at your convenience?
- A. Without accessing ConnectU's website, not easily.
- Q. Can you just do some generic ones you are aware of off the top of your head?
- A. Off the top of my head, I was aware of ConnectU as having a user profile which had a photograph of a person on the left and information about that person on the right.

I can't say for certain that that's a similarity between houseSYSTEM and ConnectU or between the Harvard formatted Facebooks and ConnectU; but either way it is a similarity.

I was also aware of ConnectU launching at some point a textbook exchange portion of their site and within that portion of the site I did notice that the order of the fields for data input for textbooks was exactly the same as the order of the fields I had created for houseSYSTEM.

- Q. Is that textbook site that you're referring to called Jungleloo?
 - A. I believe that is what it was called.
 - Q. What about it again? When you say within

the portion of the site you noticed that "the order of the fields for the data input...was exactly the same, " when you say "the order of the fields, " what are you referring to?

A. This is going into a feature I have not yet demonstrated to you on houseSYSTEM. But there was a portion called "Student Exchange" which let you trade books, book requests, items, music, movies and rides.

And you can see these are some of the books I typed in. There's some errors because of the changes in software since 2003, but you get the general idea.

And when you went to add a book listing, it asks you for certain pieces of information about that book, and so far as I could tell at the time, or at least I have this recollection of thinking, that the order in which these fields were asked for was exactly the same on both sites.

- Q. So that would be the title, author, ISBN number for the publication, the edition course. I can't see because the cursor is over it. Is that "marking"?
- A. Marking, as in were there highlights in the book or things that were crossed out.
- Q. Overall condition, price, sold, not sold and then a memo?
- A. Correct. I don't know if ConnectU had all these fields or some of them, but I remember thinking that it did look similar.
- Q. Okay. And this was the exchange program that was mentioned even in the August 1st, 2003, email that announced houseSYSTEM; correct?
- A. Correct.
 Q. It wasn't just limited to books in your emails it also included DVDs, for instance?
- A. Correct. There was a "Movies" section. Q. All right. "Movies" could either be DVD or even VHS, I assume?
 - A. Yes. In fact, it said "DVD" or "VHS."
- Q. Okay. And you could list the title, format, value. And it was sort of like a Craig's List-type function?
 - A. Yes.
 - Q. What's "Rides"?
- As I mentioned earlier, if you wanted to go, for example, to Barcelona, you could say that -well, that did not work particularly well. You could say where you were going from, where you were going to, when, if it was a round trip, and some information about that trip.
- Q. Okay. At just a high level, what other features of houseSYSTEM have we not seen that you had prepared to demonstrate this afternoon?
- A. Well, you haven't seen CriticalMass, the message board, jobs, or posters, so you basically haven't seen most of it.
 - Q. Okay. Can you show us CriticalMass.
- This is the course review portion (indicating), which you view the top 10 and bottom 10 courses at Harvard according to students. You could make lists of your favorite courses, your least favorite courses, which was called the "Blacklist," and see a general combined list in each case. And you could see a randomly-selected course evaluation from a student.

One of the most prominent features was the "Shopping List" where you could add courses that you were interested in taking which were in turn linked to the favorite and blacklist entries as well as books for those courses which you could buy from people at Harvard. And you could add up 20 courses to this list if you were truly insane and wanted to take that many at once.

And when you were done, you can click on "View Your Schedule" and it would make a calendar for the your week that highlighted the courses that conflicted with each other and the courses that were "Nonconflicting," as it says in the key.

And if it had courses that had yet to be scheduled by Harvard, they showed up up here in "To Be Determined," (indicating).

And as you asked earlier about them being interactive, you could click on a course to see more information about that course.

- $\ensuremath{\mathtt{Q}}.$ Now, you said this was similar to CourseMatch?
 - A. I believed so.
- $\ensuremath{\mathtt{Q}}.$ And what were the similarities that you recall?
- A. From a general database standpoint, it seemed like you would require basically the same information into making both products.
- Q. And that's because you needed to know what courses the students were going to be taking?
 - A. Among other things, yes.
 - Q. Okay. Any other similarities?
- A. As I said earlier, I don't recall a CourseMatch. I don't think I spent a long time looking at it, but it did seem similar.
- Q. Going back to my questions about Harvard Connection. In addition to the population of the fields in your Universal Facebook and the user interface for the student text exchange, what other similarities, if any, can you recall?
- A. I don't recall any other similarities that stood out to me at the time.
- $\ensuremath{\mathtt{Q}}.$ Do you have any others that stand out to you now?
- A. I think anything that I would consider similar now in addition to what I recalled at the time is probably influenced by media coverage surrounding this case and so I wouldn't say that I do.
- Q. At the time that ConnectU launched, do you recall any significant differences between that site and your own?
- A. There were significant differences in the visual appearance of the site; for example, the home page was all black.
 - Q. ConnectU's home page was all black?
- A. Yes. Although the trailer page for the SEC was also all black, but that wasn't the home page of the site.

ConnectU also seemed to be going for a different target audience almost -- well, maybe not a different target audience. But it seemed to have a completely different purpose. My site was designed to be useful to people.

And, frankly, my impression of ConnectU's site in May when it launched was that it was a copy of Facebook. Because I had known Facebook, as in

Mark Zuckerberg's creation, since February when it launched and I only found out about ConnectU afterward. I don't know if that is a factual belief or not, but that was my first impression.

- Q. Were you familiar -- we'll go back to this, but for now you also said that you wanted to show us the Jobs site.
- A. The Jobs portion was fairly straightforward. I could as an administrator list job postings for my own company and see other job listings that existed and students could upload their resumes and I could click on any of them and see them.
- Q. And, now, is this how the particular portion of houseSYSTEM looked or existed in or about the time the Job function launched in 2003?
 - A. Yes.
- $\ensuremath{\mathtt{Q}}.$ You mentioned at least two other sites that we hadn't seen yet.
- A. Yes. I have to hold on for the computer again.

The Poster section gave you an easy view of all the posters that had been uploaded.

- Q. So the Poster function you showed us earlier not only could be displayed on the home page, but it also would be displayed here?
- A. Correct. If you wanted to see posters of other events on campus all at once, you can just go here (indicating) and click on a poster to find out more about it. And it was often the exact same poster you would see outside because people would just print out these images and put them on bulletin boards.
- Q. All right. And, in fact, you just called up an example that existed on December 2nd, 2003.
 - A. Correct.
- Q. I don't believe we have seen the Message Board.
- A. I mentioned earlier that there were both academic and social things on the Message Board. Academics was the most popular of them all; 25 messages can be considered popular. There were also references to television shows, multiple places. And when you clicked on a message board, you could show a threaded view with both anonymous posts and actual people's names that gave you more information about whatever they wanted to talk about.
 - Q. Can you go back to the last function?
 - A. This message (indicating)?
- Q. Yes. It's a standard message board format?
- A. Yes. You can reply to messages, type your own, add a post.
 - Q. And create a new thread?
 - A. Correct.
- Q. Were there $\operatorname{\mathsf{--}}$ again, you mentioned another section we haven't seen yet.
- A. Well, FaceNet was the version of the Universal Facebook I created after the facebook.com launched on February 4th, 2004.
- Q. Now, prior to the launch of facebook.com on February 4, 2004, did you have an Invite Friends function?
 - A. No.
 - Q. All right. That was a function that you

created after Facebook?

- A. Correct. There were a number of features I created after the launch of Facebook to compete, in what I thought was a healthy manner, with Mark Zuckerberg's project. And I deliberately created several new features that Mark's site did not yet have.
- And can you give me an overview of those features that Mark's site did not yet have?
- A. One of them was the ability to say how you met somebody instead of just listing them as your friend. Here you can say the strength and where you met. Although there were limited choices, you still had that ability. And then when you were ready to confirm them, you could highlight their rows and hit "Confirm" or "Delete" as you saw fit.
 - Q. When was that feature added?
 - A. Early March 2004.
- Q. Are there other features that you're thinking of that you thought were advantageous because they were absent from Mark's site as of February 2004?
- A. We had a birthday reminder system. The best evidence I have of that, since it's not apparent from the front end of the site, is that in the Mission Control section for myself there was an automated time-based task link for a birthday reminder system. And I'm not exactly sure what will happen. I don't want to end up emailing a lot of people. I don't mean to so...
 Q. That's fine.

 - A. That was there, which Mark did not have.
 - Q. Anything else?
- We had the ability to draw your network in pdf format. This does not work now, but you could see a visual representation of people you knew in a web style using software from AT&T.

And though Mark later did that, he did not have that at the time, and he did it a different way which was less advantageous.

And we had the Photo Album which did not exist on Mark's site. And then once you clicked on a particular person, you could see right on their profile specific sections for other parts of the site, such as CriticalMass and books they had listed on Student Exchange.

So those were most, I think, but not necessarily all the features that I put in right away.

- All right. When did you add the birthday feature?
 - I don't recall exactly. Α.
 - It was after February 4th, 2004, though?
- Yes. After February 4th and probably before March 31st.
- Q. And when did you add the network feature, the Draw Your Own Network feature?
- A. As soon as I launched FaceNet. I don't recall the exact date for that either.
- Q. But the launch of FaceNet occurred after February 4th, 2004?
 - Α. Yes.
- All right. When did you add the Photo Album feature?
 - A. I believe in the fall of 2003.
 - So the Photo Album feature existed before Q.

the launch of Facebook?

- A. Correct.
- Q. Can you show us that again.
- A. Here's an example photograph of my friends. Well, maybe. It was there a second ago.
- Q. And where would this be posted if you were a registered user in October of 2003?
 - A. Where would this be posted?
- Q. Yes. Where would the photo albums exist? I mean, how would a student know where to find any particular photo album?
- A. The intent was for them to click on the link on their respective site that simply said "Photo Album." There wasn't much of a search interface.
- Q. All right. What I guess I'm getting at is: If you lived in Cabot House, and let's say both of us lived in Cabot House, if I uploaded one set of photos at noon and then you uploaded another set of photos 5:00 p.m., would they all be shown together as part of Cabot House's photo album?
 - A. Yes.
- Q. All right. And were they then available to be viewed by somebody at, say, Pforzheimer House?
- A. Yes, somebody at Pforzheimer could have gone and looked at them.
- Q. But it wouldn't say that the noon photos were uploaded by Monte Cooper and the 5:00 p.m. ones were uploaded by Aaron Greenspan. It would be all put together under Cabot House?
- A. I don't exactly remember how it worked at the time, but I think many of the features on here I did stamp with people's names so I would have expected that to work the same way.
- Q. Was there a text feature in which you could make any comments about the photos?
- A. I don't recall. I seem to remember putting in a memo field, but I don't know exactly.
- Q. Do you know when that occurred or even if it did occur?
 - A. I don't recall.
- Q. You were in the midst of going to show us some features in the Universal Facebook. I didn't mean to cut you off earlier. Did we see everything?
- A. The one part you have not seen is the way that you would edit your profile which is part of the My Account section.
 - Q. Okay. Can you show us that, please.
- A. This is the FaceNet profile section of My Account (indicating) which is also linked to at the top of the screen. And as you can see, there are fields for a quote, favorite books, favorite movies, a random fact and favorite email closing. And you can then upload a photograph over here (indicating) and determine privacy settings for each piece of information here (indicating).
- Q. All right. Now, were each of these options made available before January 1st, 2004?
 - A. Some of them were; some of them were not.
- Q. Can you tell me which ones, to the best of your recollection, were available before January 1st, 2004?
- A. I believe that "Quote" was available and I believe some of the privacy settings were available.

 Also I've just noticed that one of

the things I must have added after the launch of

Facebook was the ability to tie it to multiple IM networks, not just AOL Instant Messenger.

- Q. And that's because ICQ and MSN are also messaging systems; correct?
 - A. Correct.
- But in all other respects do all of Q. the fields look like those that existed as of the original launch of Universal Facebook?
 - To me they did.
- Q. Going back up, "Favorite Email Closing," did that exist before January 1st, 2004?
 - A. I don't believe so.
- Q. All right. Do you know when you added it?
 A. It must have been very close to February, early February of '04, or even there's a possibility I added that particular one in late January of '03 because I remember the precise person who suggested it and thought it would be a funny thing to have in the site.
- Q. All right. Who was the precise person who suggested it?
 - A. Brad Rosen.
 - Q. And is he a friend?
 - Yes. Α.
 - Q. Was he a member of Harvard SEC?
- No. He was a member of houseSYSTEM, Α. however.
- Q. Okay. And you have a specific recollection of his making the recommendation for its inclusion?
 - A. Yes.
- Q. And it occurred before February 4th, 2004? A. As I said, it may have, but it was definitely around that time frame.
- Q. "A Random Fact," do you know when you added that feature?
- A. I believe that would have been included in March of 2004.
 - Q. All right. "Favorite Movies"?
- I believe the same is the case for "Favorite Movies" and "Favorite Books."
 - Q. But "Quote" existed from the beginning?
 - Yes. Α.
- If you go back, you had a "Check Q. Connections" or you had something called "Connections."
 - A. There are two links.
- Q. All right. When was the Connection feature -- the features underneath "Connection" added?
- A. After February 4th, 2004. Q. All right. Were those amongst the features you added to be competitive with Facebook?
 - Yes. Α.
- Q. Okay. Are there any other features of houseSYSTEM that you haven't had a chance to show us that you believe would be useful for us to see, as you sit here today?
- A. It's hard for me to predict relevance to your case, but I can show you two additional features that were respectively not used very much, or if at all, and were in the middle of being developed.

One of them was, again, assuming cooperation from the university, an alarm system that could reach a lot of students simultaneously if

there were some sort of safety problem. Harvard had had a lot of safety-related issues during the time I was there with people being an assaulted on the street, and so I thought rather than using the open lists, which were often inefficient and didn't reach the whole university, that administrators could optionally turn on this bar at the top (indicating) to reach many students. That never actually happened, but it was easy to program.

And then another feature I was working on was something I called "Organizations" which was a way for student groups to centralize a message board, document uploads, photos, pretty much everything that a student group would want to talk about in one place.

I don't know that this ever really worked very well, but you can see that I started making calendars and a message board and posters and things of that nature.

- Q. Okay. I saw a function "Search Emails" --"Search Email Addresses."
- A. On FaceNet there is an ability to search for people by name or email.
- Q. When did that get added?
 A. After February 4th, 2004, and before March 31st.
- Q. Okay. Is that because that feature existed in Facebook when it launched in February 4th, 2004?
 - A. In part, yes.
- And "Invite Friends," when did you add Q. that feature?
 - A. During the same time frame.
- All right. And, again, was that a Q. response to the fact a similar feature existed if Facebook when it launched?
- A. No. Because I don't believe the similar feature did exist in Facebook when it launched.
- Q. Well, did Facebook have the ability to identify friends when it launched?
 - Α. Yes.
- And did Facebook have a function called Q. "Poke"?
 - To my knowledge, yes. Α.
- Q. Okay. And did Poke allow other people with similar interests to recognize that you might want to say hello or something to them cyber net or in a social context?
- A. My understanding was that it was a joke feature that had no practical purpose and could not be used with people not on the system, which is different than "Invite Friends" which was designed to be a way to reach out to people who were not yet a member.
- Q. Okay. Well, on Facebook, though, you could list your friends, correct, as of February 1st, 2004?
- A. Correct.
 Q. And you could add new friends. That was a function of the site as of that date; correct?
 - A. Correct.
- Q. And you could let people know that you wanted to invite them as friends; correct?
- A. No. You could not let people not on the system know that, to the best of my knowledge.
 - Q. All right. So your recollection is that

feature did not exist?

- A. Correct. My recollection is that people signed up for Facebook for two reasons: Word of mouth and The Crimson.
- Q. Okay. Do you agree at some point in time Facebook added a feature that allowed you to let other individuals using the site know that you would like them to be a member of your friend list?
- A. I believe that happened several years later, but I don't know the exact date when it did.
- Q. All right. So to the best of your recollection, your invitation system existed before Facebook's?
 - A. To the best of my knowledge, yes.

 MR. COOPER: Okay. I think we can go back

MR. COOPER: Okay. I think we can go back with the video on him.

THE VIDEOGRAPHER: Short break?

MR. COOPER: Sure.

THE VIDEOGRAPHER: Off the record at 2:34. (Off the record.)

(Whereupon, Greenspan Exhibit 9 was marked for identification off the record.)

THE VIDEOGRAPHER: Back on the record at

2:47.

MR. COOPER: While off the record I believe all counsel can stipulate that exhibits 1 through 8 are nonconfidential even if marked as confidential. But Exhibit 9, which begins with AG13 and extending through AG70, shall in fact remain confidential.

MR. FURBUSH: That's agreed.

BY MR. COOPER:

- Q. Mr. Greenspan, while we were off the record we had marked what has been marked as Exhibit 9. It appears to be a spreadsheet log that was produced by you in this case?
- A. It is a spreadsheet version of the houseSYSTEM member table with certain fields removed; yes.
- Q. All right. And does this information contain the names of individuals who signed up or who registered for houseSYSTEM during its existence while it operated at Harvard?
 - A. Yes.
- Q. And it first gives the members by ID -- member ID; correct?
 - A. Yes.
 - Q. And you, in fact, are Member ID No. 1?
 - A. Correct.
- Q. And then it gives first and last names; for instance, you're Aaron Greenspan; correct?
 - A. Correct.
- Q. And then it gives a field for "Mailbox." Is that the Harvard mailbox that was used by the student?
 - A. Yes.
- Q. All right. Then it gives a "Residence ID," and that's the residence ID used by the student?
- A. That is the residence ID assigned by the system.
- $\ensuremath{\mathtt{Q}}.$ And the Residence ID, did that assign it by house?
 - A. By building.
 - Q. Okay. And that's because the freshmen

are halls in addition to the houses being for upperclassmen; correct?

- A. Correct.
- Q. And then it gives room number?
- A. Correct.
- Q. So and then a phone number if its been registered by the user?
 - A. Correct.
- $\ensuremath{\mathtt{Q}}.$ And then email which was necessitated to sign in?
 - A. Yes.
- Q. All right. Then if a website was provided, it was also listed?
 - A. Yes.
- Q. All right. Where was the website when it was listed on the houseSYSTEM?
 - A. I believe it was on the sign-up page.
- Q. Okay. Was that in existence before or after February 4th, 2004?
 - A. Before.
- $\ensuremath{\mathtt{Q}}.$ And then it gives the AOL Instant Message ID?
 - A. Screen name; yes.
- Q. All right. And then if they also have a Microsoft MSN IM ID, it would give that?
 - A. Yes.
- Q. And then an ICQ, which is a form of Internet communication, if they had a screen name or an identifier for that, it would give it?
 - A. Yes.
- Q. All right. And then home state or providence, if they -- they could give that field?
 - A. Yes.
- Q. All right. And then class, which existed even in October 2003?
 - A. Yes.
- Q. And next was a concentration which you assigned an ID for?
 - A. Correct.
- $\ensuremath{\mathtt{Q}}.$ And that would have been created by you; correct?
 - A. It would have been assigned by the system.
- Q. All right. And the system -- but, for instance, there is nothing at Harvard that says the School of Engineering is ID 20, for instance; correct?
- A. Correct. Which is why it was assigned by the system.
 - Q. Okay. That's all I was...
 "Change Concentration," what was that?
- A. It looks like an unused field for the most part that I may have intended to represent whether or not somebody had changed their concentration from one thing to another.
- Q. So if someone had changed like from physics to economics, in theory they could fill in that field?
 - A. Correct.
- Q. And then "Future Plans," it seems to have an ID assigned to it.
 - A. Correct.
- Q. Is that because it was a drop-down menu on the house ${\tt SYSTEM}$ site?
 - A. Yes.
- Q. All right. And then either "Anonymous," "No" or "Yes" is the next field?

- A. Correct.
- Q. All right. "Source" is the next field. What is that?
- A. I intended it to be a field to track the way they had found house ${\tt SYSTEM.}$ It looks like it was not used.
- $\ensuremath{\mathtt{Q}}.$ And "Resume" was because -- is the next field?
 - A. Yes. This was also not used.
- Q. But we saw "Resume" was available on the Job function?
 - A. Correct.
- Q. All right. This isn't referring to the Job function?
 - A. This field was not used.
- Q. Okay. Do you know if -- did students post their resumes ever to the Job site on houseSYSTEM if you know?
 - A. As you saw during the demonstration, yes.
- Q. Okay. So this field doesn't correspond to if they uploaded their resume on Jobs?
 - A. Correct.
 - Q. Okay. "Level." What is "Level"?
- A. There were a number of security levels built into the site; one being administrator, I believe 5 being a normal user or an SEC member, 7 being an alum. They corresponded to different kinds of usage scenarios.
- $\ensuremath{\text{Q.}}$ All right. And there's somebody who has an 8.
 - A. That may very well be.
 - Q. You don't have a recollection what it is?
 - A. No.
 - Q. "Remote Host" is the next field.
 - A. Yes.
- Q. Now, that would be the host computer from which the individual would log on?
- A. To be precise, it's the DNS host name of the computer that was used to log on.
 - Q. How was that information generated?
- A. The server, which is receiving the request for information, such as a website, sends out a new request to the DNS server that it's been configured to use.

The DNS server forwards along a series of requests until it finds the DNS server for the appropriate domain; in this case harvard.edu. That request is passed back on the chain of DNS servers until it returns data to the originating requester function which then finds its way back to the database.

- Q. Is there a reason some people have the Remote Host information available and others don't?
- A. There is a reason. I don't know what it is in each case, but there is always a reason.
- Q. All right. But every single person who ever logs into houseSYSTEM, whether they're on campus or in California, is going to have an IP number; correct? Or IP address?
- A. Based on my knowledge of how TCP/IP works, yes.
- Q. All right. So do you have any reason why if you could, for instance, track an IP number or a DNS address for somebody who is using spencerstewart.com, like user No. 7 -- or user No. 8, you wouldn't know for the user No. 9 what

their IP address is?

- A. It's possible that user 9 never logged in, though it seems unlikely. It's possible that user 9 never logged in when I was tracking remote hosts.
- Q. Okay. Do you know when you started tracking remote hosts?
 - A. Not precisely.
- Q. All right. As an administrator, you had the right to see what IP address is logged into your system, though; correct?
- A. Correct. The remote host was always tracked by the Apache server logs which are a separate document, but they may or may not have appeared in this table.
- Q. Okay. You have a time stamp in the next column.
 - A. That is correct.
- $\ensuremath{\mathtt{Q}}.$ And that appears to be the time stamp for last use?
 - A. Not precisely, but approximately, yes.
 - Q. What makes it approximate?
- A. MySQL is designed to automatically update the first field with the time stamp type with the last time that the record was modified regardless of whether it was modified even with the exact same data.
- Q. Okay. So all users who are in a particular class will be given the last date when that type of log occurs; correct?
- A. Regardless of class, anytime a user signed into the site, that field would have been automatically updated.
 - Q. Okay. The Create stamp is the next field.
 - A. Yes.
- $\ensuremath{\mathtt{Q}}.$ And that's the date that the user first logged on?
 - A. It's the date that the record was created.
- Q. Okay. Which is, would you agree, representative that the user had sometime on or about that date logged into the system?
- A. In the vast majority of the cases, that would be true.
- Q. All right. And then they were assigned a member ID by the house ${\tt SYSTEM?}$
- A. I believe whoever prepared this spreadsheet just repeated the first column at the end of the spreadsheet for convenience.
 - Q. Where was this spreadsheet generated from?
- A. I used MySQL Administrator which is a Windows-based program to export the data from MySQL to a comma-separated file, the comma-separated file was presumably imported to another program like XL and then printed.
- Q. Is this an accurate reflection of the identities of individuals that you know at one time or another accessed the houseSYSTEM?
 - A. Yes.
- Q. Is it a true and accurate representation of the dates that the individuals may have accessed the system, for instance, for the first time in the Create file?
- A. Yes. With the only exception being my own record which had a modified time stamp at the very beginning based on my working with the demo to keep it functioning.

- Q. So your own only concern is that you have a modified time stamp that unlike any other user shows a last used date of July 29th, 2007, which is after houseSYSTEM ceased to operate at Harvard; correct?
- Correct. The only other possible Α. exception is the demo account which falls under the same kind of exception.
- Q. Right. But in all other respects all the other user information relates to -- was generated while the houseSYSTEM was operating at Harvard; correct?
- A. Correct. Q. And it's all accurate, to the best of your understanding; correct?
 - A. Correct.
- Q. And it all reflects the information that users entered into their user registration information when they logged in; correct?
 - A. Correct.
- Q. User No. 45 on the very first page is an individual named Victor Gao.
 - A. Yes.
 - Q. Do you know Victor Gao?

 - A. Not personally. Q. You've never me You've never met Mr. Gao?
 - A. Not to my knowledge.
- All right. Do you have an understanding Q. if he had a relationship into the development of Harvard Connection?
 - A. I believe he did.
- Q. Okay. First of all, are you familiar with what Harvard Connection is?
- A. My understanding is that it's the previous name of ConnectU.
- Q. Okay. And you have an understanding that Victor Gao is associated with the development of that website?
 - A. That is my understanding.
- Q. But while you were at Harvard you didn't know Mr. Gao?
 - A. Correct.
- Q. Okay. If you go to the entry logs for Mr. Gao which I believe is No. 45.
 - A. I'm sorry. Do I have the entry logs?
- No. If you follow to page 2 where that information is generated.
 - A. Yes.
- You'll see he has a create stamp of 3/9/2003, I believe?
 - A. Yes.
- Q. So is it safe to say based on the manner in which these records were always maintained Mr. Gao signed into houseSYSTEM sometime on or around March 9th, 2003?
- A. I believe Mr. Gao signed in to CriticalMass or signed up for CriticalMass on March 9th, 2003.
- Q. And that's because as of March 9th, 2003, houseSYSTEM hadn't been made available to the general populous; correct?
- A. It did not exist.
 Q. Yes. Now, it has the last time stamp of February 15th, 2004.
 - A. Correct.
 - So that means Mr. Gao did sign into the Q.

system sometime around February 15th, 2004 again; correct?

- A. That is the last time he signed into houseSYSTEM but not necessarily the only time.
- $\ensuremath{\mathtt{Q}}.$ But that was after the Universal Facebook was created; correct?
 - A. Correct.
- Q. Do you know if Mr. Gao ever created a Universal Facebook profile?
 - A. I don't recall.
- Q. Okay. Go to page 15, AG15, entry No. 73. If you go to entry No. 73, do you see Nathan Rosenberg?
 - A. Yes.
 - Q. All right. Do you know Mr. Rosenberg?
 - A. No.
- Q. And if you look at 73, he created his profile on or about April 8th, 2003?
 - A. Correct.
- Q. That, again, would be when CriticalMass was in existence but not houseSYSTEM?
 - A. Correct.
- Q. But his last usage occurred March 7th, 2004; correct?
 - A. Correct.
- Q. Which is after Universal Facebook was created; correct?
 - A. Yes.
- Q. All right. If you go down to entry No. 132 on the same page, you'll see Joe Jackson.
 - A. Yes.
- Q. Did you know Joe Jackson while you were at Harvard?
- A. I believe there were two Joe Jacksons at Harvard in my class and I believe I knew one of them.
 - Q. Which Joe Jackson do you believe you know?
 - A. I don't know.
- Q. Okay. Let me restate it.
 Did the Joe Jackson you know, was he involved with computer science?
- A. He was interested in technology and had red hair. That's about all I remember.
- Q. All right. Do you know if he was involved with the development of Harvard Connection?
 - A. I have no idea.
- Q. The Joe Jackson that is No. 132 first signed into the houseSYSTEM -- or into CriticalMass on 12/17/2002; correct?
 - A. Yes.
- Q. And his last use was February 15th, 2004; correct?
 - A. Yes.
- Q. All right. If you go to page 61, you'll see entry 1645, Cameron Winklevoss.
 - A. Correct.
- Q. And that's the Cameron Winklevoss you understand is associated with the development of ConnectU?
 - A. Yes.
- Q. All right. It appears Mr. Winklevoss signed in on March 15th, 2004, for the first time.
 - A. It appears he signed up on that day.
- Q. Right. And that's after the Universal Facebook had been created; correct?
 - A. Correct.

- Q. And it looks like his last usage was September 17th, 2004. Correct?
 - A. Yes.
- Q. And he logged in from a remote site with the IP address 209.58.148.120; correct?
 - A. Yes.
- Q. All right. Did you ever discuss houseSYSTEM with Mr. Winklevoss?
 - A. No.
- Q. Have you ever discussed house SYSTEM with Tyler Winklevoss?
- A. I never discussed anything with either of them.
- Q. All right. Have you ever talked with either Mr. -- Cameron or Tyler Winklevoss?
 - A. No.
 - Q. Have you ever talked with Divya Narendra?
 - A. Not to my knowledge.
- Q. Okay. If you go to page 29, you'll see --you understand what I'm talking about, AG29 down at the bottom?
 - A. Yeah.
- Q. Would you agree that user No. 541 is Chris Hughes?
 - A. Yes.
- Q. And Chris Hughes signed on about September 13th, 2003?
 - A. Yes.
- Q. And his last usage was about March 18th, 2004?
 - A. Correct.
- Q. And then user No. 547 on the same page is Dustin Moskovitz?
 - A. Yes.
- Q. And he signed onto the system on September 13th, 2003?
 - A. Yes.
- Q. And his last usage was February 15th, 2004; correct?
 - A. Correct.
 - Q. Do you know Chris Hughes?
 - A. I have spoken with him.
 - Q. All right. Did you know him in 2003?
 - A. No.
- Q. Do you know if he has a relationship with Facebook; the Facebook that I represent?
- A. I'm aware that during the time that I was in Harvard he was Facebook's spokesperson.
- Q. Right. And did you talk with him when he was still at Harvard?
 - A. No.
- Q. All right. You've talked with him after you both left Harvard?
 - A. Yes.
 - Q. And do you know when that was?
 - A. Sometime during the summer of 2007.
 - Q. What was the subject of the discussion?
- A. It was related to his work with the Obama campaign. $\ensuremath{\mathsf{A}}$
- Q. Okay. It had nothing to do with this lawsuit?
- A. I had one conversation with him over the phone in which we discussed the Obama campaign and he mentioned that he was aware of houseSYSTEM.
- Q. Okay. But that was the only time you spoke with him?

- A. We exchanged emails after that but they were again focused on the Obama campaign, and houseSYSTEM may again have been mentioned, but the lawsuit itself was not the focus of our discussion.
 - Q. Okay. Do you know Dustin Moskovitz?
 - A. I have met Dustin. I don't know him well.
- Q. All right. Did you meet him while he was still at Harvard?
 - A. Yes.
- $\ensuremath{\mathtt{Q}}.$ All right. How often did you meet with him?
 - A. Once.
- Q. All right. Was that before or after the Facebook launch?
 - A. Before.
- Q. Were you aware he was a -- that he had signed on to houseSYSTEM?
- A. At the time I don't think I bothered to check. But after that I became aware.
- Q. All right. What was the circumstance that you met Dustin Moskovitz?
 - A. I was having dinner with Mark Zuckerberg.
 - Q. All right. Now, if you look at user 1234. MR. FURBUSH: What page are you on?

BY MR. COOPER:

- Q. That would be on page 49.
- A. Yes.
- Q. Mark Zuckerberg is listed there; correct?
- A. Correct.
- Q. And he signed on about January 8th, 2004; correct?
 - A. No.
 - Q. January 6th, 2004?
 - A. Yes.
- Q. Okay. One thing, it appears that the numbers or the users are assigned the number that they are chronologically; is that correct?
- A. Meaning that users are assigned in the order that -- are assigned member IDs in the order they sign up?
 - Q. Yes.
- A. That is correct. They are not always chronological if a record gets deleted, but generally speaking, that that is the algorithm.
- Q. So to the best of your knowledge, these should be relatively accurate?
 - A. Yes.
- Q. So Mark Zuckerberg signed into houseSYSTEM on or about January 6th, 2004?
 - A. Under his own name, yes.
- Q. All right. Do you have an understanding that he signed on under any other name before then?
- A. I have an understanding that I sent him an email with a link as early as September 18th, 2003, in which case I would have expected him to click on that link, though he may not have signed in. And I also have an understanding that he was roommates with Dustin Moskovitz and Chris Hughes and may have used one of their accounts.
- $\ \mbox{Q.} \ \mbox{But you don't have any personal knowledge}$ of that?
 - A. No.
- Q. So as far as your records reflect, the first time Mark Zuckerberg, at least under his name, signed in was on January 6, 2004?
 - A. Correct.

- And that's after the Universal Facebook was made available; correct?
 - Yes. Α.
- And the last date that shows for a Q. Mr. Zuckerberg was May 22nd, 2004?
 - A. Yes.
- Now, if you go back to page 61. User 1669 is Eduardo Saverin?
 - A. Yes.
- All right. And he signed in on or about Q. for the first time March 19th, 2004?
 - A. Yes.
 - And his last use was the same day? Q.
 - Α. Correct.
- And, in fact, it was one minute after he Q. had signed on?
- A. To be precise, that means that he signed up at 3:36 p.m. and signed in a minute later for an unknown period of time based on this document.
- Q. Okay. But that appears to be the only date that he ever used the houseSYSTEM; correct?
 - A. Correct.
 - All right. Do you know Eduardo Saverin? Q.
- A. Not personally, no. Q. Okay. What efforts were made by you to publicize the Universal Facebook after it launched on September 19th, 2003?
- A. As I've described, we sent emails, we told people in person about it, I attempted to contact The Crimson to get some press about it. Members of SEC's board designed posters. We attempted, as I've discussed, to gain administrative support for efforts that were designed to improve student life. We tried many different things.
- Q. So is it safe to say you tried to publicize Universal Facebook as widely as possible to the Harvard community?
 - A. Yes.
- Q. Did you feel you were successful in getting information out broadly to the Harvard community?
- To a very limited extent I was successful Α. in retrospect.

(Whereupon, Greenspan Exhibit 10 was marked for identification.)

MR. COOPER: I think this will be one you'll agree can be nonconfidential again, but we will can take care of it at the end. BY MR. COOPER:

- Q. Mr. Rosenberg [sic], I put in front of you a --
 - Α. Greenspan.
- Sorry. Mr. Greenspan, I put in front of you a series of emails ending with one dated Saturday, September 20th, 2003, from Lowell-Open-Request@toad.hcs.harvard.edu to Lowell-Open@toad.hcs.harvard.edu.
 - Yes. Α.
- Is this still the Lowell-Open email account that people could register for at Lowell House?
 - Α. Yes.
 - And is it you sending this email?
- This is a digest of several emails sent by Α. the mail server.
 - Q. All right. Do you believe you have seen

this email before today?

- A. Yes.
- Q. All right. Did you produce this email from your own records?
- $\bar{\text{A}}.$ I did produce it from my own records. I did not write the entire document.
 - Q. Did you write a portion of the document?
 - A. Yes.
- Q. There's a part called "For" on the first page called "Today's Topics"?
 - A. Yes.
- Q. First of all, is this representative of a type of email that was routinely sent out to the open mailing list at Lowell House?
 - A. Yes.
- Q. How was it typically one of these emails created, if you know?
- A. In the same manner as any other emails. Somebody would write something intending to reach a large audience and send it through their typical email program.
- $\ensuremath{\mathtt{Q}}.$ All right. Well, you said you wrote a portion of this.
 - A. Correct.
- Q. All right. How was it that you only wrote a portion rather than the whole thing?
- A. I wrote a message which is in this document listed in the index as message 5. And sent that to one email address which is representative of the mailing list, which would in turn would mail multiple people.
- Q. Okay. First of all, there is on the first page "Today's Topics."
 - A. Correct.
- Q. Were these types of emails meant to be sort of a newsletter that were sent out to the registered members of Lowell House that were on the open email server?
- A. Perhaps in a manner of speaking. Newsletters tend to be officially mandated and edited. This is unedited and unofficial.
- $\ensuremath{\mathtt{Q}}.$ All right. Do you know who Eli Sprecher is?
- A. No. But presumably he also lived in Lowell House.
- Q. All right. And you see on page 86 he references CourseMatch, or 85, 86 he references CourseMatch?
 - A. Yes.
- Q. And do you see where he says, "CourseMatch allows you upon registering to see who's in your classes and what classes others are taking"?
 - A. Yes.
- Q. This is the CourseMatch that Mark Zuckerberg created?
- A. Given that Mark Elliott Zuckerberg is cc'd on the message, it would appear that way.
- Q. In fact, Mark Zuckerberg was cc'd on this very email; correct?
 - A. As I just said, yes.
- Q. Okay. Do you recall that CourseMatch allowed individuals upon registering to see who was in their classes and what classes others were taking?
- A. As I've mentioned repeatedly, I have a very fuzzy memory of CourseMatch and I don't

actually recall that functionality, but that is what the email says.

- Q. All right. Message 5, which is below it, is the message you say you created.
 - A. Yes.
- Q. All right. And that's because it's sent from Harvard College SEC?
 - A. Yes.
- Q. All right. And, again, it appears to be the global email announcing the creation of the Universal Facebook; correct?
 - A. Yes.
- Q. So this was again part of the campaign to publicize that Universal Facebook was available and online?
 - Correct. Α.

(Whereupon, Greenspan Exhibit 11 was marked for identification.)

BY MR. COOPER:

- Q. Mr. Greenspan, I put in front of you Exhibit No. 11, "Usage Statistics for www.kirkland.harvardsec.org"?
 - A. Correct.
- Q. And is this a document you generated?
 A. It's a document I possess. I did not generate it.
 - Q. Do you know how this document was created?
- Using a software application called Webalyzer 2.01.
- Q. All right. Do you know who used it to create this document?
 - A. This document was created automatically.
- All right. Who gave the command to the computer to create this document?
- A. At some point in time much earlier I did on a recurring basis.
- Q. Okay. Are you able to say that this is the type of document that was made at or near the time of the information contained in it?
- A. According to the document, it was created on October 1st, 2003, at 8:21 p.m.
- Q. Do you have any reason to doubt the accuracy of that statement?
 - A. No.
- And it's for a summary period of Q. September 2003?
 - A. Yes.
- Q. And you were one of the people who had knowledge of how this computer software could generate this information?
- A. Correct.
 Q. And you were one of the people who regularly kept it as part of your activities?
- A. When you say "kept it," what do you mean? Q. You had custodial rights over this by virtue of the fact it was maintained by the server; correct?
 - Α. Yes.
- And you had the access rights to the information stored on the server?
 - A. Yes.
- And it was the practice of Harvard SEC to Q. make this type of record?
- A. It was the practice of Think Computer to automatically generate this kind of document for all of its hosting clients.

- Q. Okay. But, again, Think Computer is an entity over which you personally have access rights; correct?
 - A. Yes.
- Q. And it can be considered the custodian of this document; correct?
- A. It could be considered the creator, I suppose.
- Q. Okay. Could you at a high level tell me what the information is that's contained in this document.
- A. It's a summary of statistics based on the Apache logs for the virtual site www.kirkland.harvardsec.org.
- Q. So is this the usage site for -- does this reflect the amount of usage in the month of September for houseSYSTEM by Kirkland House?
 - A. It reflects part of the usage.
 - Q. What else does it reflect?
 - A. Nothing.
 - Q. Okay. On page 1 it gives total hits.
 - A. Yes.
- Q. Is that the total number of times the site was contacted by somebody from Kirkland House in September 2003?
- A. It's the total number of http requests received by the server.
- Q. And when it says "Total files," what do the files refer to?
- A. Both web pages and graphics and style sheets associated with them and other miscellaneous files that are used to support those pages.
- Q. All right. And then it gives total visits?
 - A. Correct.
- Q. And then it gives -- is that the number of actual times the site was visited by somebody from Kirkland in the month of September?
- A. Yes. Though I believe that number should be treated as approximate.
- Q. Okay. And why should it be treated as approximate?
- A. If two people using the same IP address visited the site one after another, there would be pretty much no way to distinguish between them.
- Q. Did you maintain this type of information for all houses?
 - A. Yes.
- Q. So there should be similar usage statistics for Pforzheimer House?
 - A. Yes.
- Q. I didn't see that in part of your subpoena. Would you have any concern about producing that at a later date to your attorney to produce to us just for Pforzheimer House?

MR. FURBUSH: You didn't see that in the documents we sent you?

 $$\operatorname{MR}.$ COOPER: I didn't see it. I saw only Kirkland.

THE WITNESS: I would have no problem producing that. BY MR. COOPER:

- Q. Okay. All right. And I assume similar statistics exist for other houses, including like Lowell and the like; correct?
 - A. Correct.

- Q. If you go to page 1230. You have a "Top 26 of 386 total URLs"?
 - A. Yes.
- Q. Are these the top 26 URLs that were being accessed in the month of September by Kirkland House that were made available through houseSYSTEM?
 - A. Yes.
- Q. All right. No. 1 seems to be blank. Is there a reason for that?
 - A. It's not blank. It's the root.
 - Q. So that's the main page?
 - A. It's the home page, yes.
 - Q. Okay. No. 5 is Facebook.
 - A. Correct.
- Q. And it suggests 45 hits were made in the month of September 2003 alone from Kirkland House?
 - A. Correct.
- Q. Do you have a knowledge between when Facebook launched on the houseSYSTEM in September 2003 and in February 4th, 2004, how many hits were made to the Facebook site in aggregate from all houses?
 - A. I don't know.
 - Q. Would it be in the tens of thousands?
 - A. It could be, but I don't know.
- Q. Would you at least agree it was in the thousands?
- A. I wouldn't want to put a number on it without actually looking at the documents.
- $\ensuremath{\mathtt{Q}}.$ Would you be able to generate that information?
 - A. I suppose I could.
- Q. Would you have any objection, again, if you could, at a later date generating it for your attorney, just that information?
- A. I suppose so, though it would take a while, but I could do my best.
- Q. Okay. But this document reflects that in the month of September alone from Kirkland House Facebook was hit 45 times on houseSYSTEM; correct?
- A. Beginning as of September 23rd, yes. So really this represents a week rather than a month.
- Q. All right. And it was already the No. 6 most popular hit -- or the No. 5 most popular hit even though over half the month it was not available; correct?
- A. Yes. Though I believe that's actually misleading.
 - Q. Why do you think it's misleading?
- A. The Facebook by virtue of its functionality has many more files associated with that page than most of the other pages on houseSYSTEM.
- So, for example, if there are a hundred people on the Facebook, that means a hundred additional graphics have to be rendered and displayed. So though it may look from this table to be one of the more popular features, in actuality it was one of the less popular features.
- $\ensuremath{\mathtt{Q}}.$ Do you have an understanding why it was less popular?
- A. I don't have an accurate understanding. I only have hypotheses.
 - Q. Okay. You don't need to guess so...
 - A. You say, "You don't need to guess"?
 - Q. No, you don't need to.

(Whereupon, Greenspan Exhibit 12 was marked for identification.)

BY MR. COOPER:

- Q. Mr. Greenspan, I put in front of you an email dated October 10th, 2003, from Harvard College SEC to Harvard College SEC. Is this again an email you generated?
 - A. Yes.
- Q. All right. And is it intended to advertise to subscribers to the Harvard College SEC group email new features of the houseSYSTEM?
 - A. Yes.
- Q. All right. And in the middle of the page would you agree that you're including amongst the new systems Facebook?
 - A. Yes.
- Q. And if you go down, would you agree it now includes "Jobs"?
 - A. Yes.
- Q. So does that refresh your recollection that "Jobs" was available on houseSYSTEM as of at least October 10th, 2003?
 - A. Yes.

(Whereupon, Greenspan Exhibit 13 was marked for identification.)

BY MR. COOPER:

- Q. By the way, before we go. When you had sent out an email like Exhibit No. 12, was it your intention to try by doing so to popularize Facebook, among other features, the Universal Facebook?
 - A. Yes.
- Q. All right. And did you send out this type of newsletter on a regular basis?
- A. Well, as you can see, this was Volume I, Issue 1, and so at that point, no. Later on other newsletters would be sent, but it was not on a specific time period interval. It was more sporadic as features were completed.
- Q. Did you try and send it to more than just the Harvard SEC group email account?
- A. It was sent to the mailing list on houseSYSTEM for both SEC members and houseSYSTEM members.
- Q. Okay. But, again, the idea was to try and get as many people to know about the new features on houseSYSTEM as possible; correct?
 - A. Correct.
 - Q. And that included Facebook; correct?
 - A. The Facebook was one of the features.
 - Q. The Universal Facebook?
 - A. Yes.
- Q. Okay. Exhibit 13 appears to be the usage statistics for Kirkland House for October 2003; correct?
 - A. Correct.
- Q. And if you go to page 1241, you'll see again "Top 10 of 12" entry pages.
 - A. Correct.
 - Q. And it lists Facebook No. 2 with 154 hits.
- A. I must be looking at the wrong place. Which page again?
 - Q. 1241.
 - A. Sorry. Yes.
- $\,$ Q. All right. And, actually, if you look at page 1240, the previous page, Facebook is again listed as the fifth most popular site with the same

number of hits, 154; correct?

- A. Correct.
- Q. Did you see a spike in the number of people looking at the site after you launched -- looking at houseSYSTEM after you launched Facebook?
 - A. No.

(Telephone interruption.)

MR. COOPER: Can we go off the record?

THE VIDEOGRAPHER: Off the record at 3:31.

(Off the record.)

THE VIDEOGRAPHER: Back on the record at

3:31.

BY MR. COOPER:

- Q. So, Mr. Greenspan, before the interruption you said that you did not see a spike in usage after you launched Universal Facebook?
 - A. No.
- Q. Did you expect that there was going to be a surge after you launched Universal Facebook?
 - A. No.
 - Q. Why didn't you expect a spike?
 - A. Why would I have?
- Q. Did you have any expectation Universal Facebook would prove to be popular?
 - A. No.
- Q. All right. What did you think was likely to be the most popular feature of houseSYSTEM?
- A. My guess in August of 2003 was that the Shopping Periods Scheduler would be the single most popular feature.
 - Q. And why was that?
- A. Because that was the most controversial issue of 2002, 2003. Preregistration was a big concern to people back then and that was the issue I was really trying to address.
 - Q. Did that assumption prove correct?
 - A. I believe so.

(Whereupon, Greenspan Exhibit 14 was marked for identification.)

BY MR. COOPER:

- Q. Mr. Greenspan, I put in front of you the usage statistics for Kirkland House for November 2003.
 - A. Correct.
- Q. And, again, this is the same type of record as Exhibit 13 and 11; correct?
 - A. Yes.
- Q. And they were all generated by your software via Think Tank?
 - A. Think Computer; yes.
- Q. If you turn to page 1250, it lists again the top 30 of 406 URLs visited.
 - A. Yes.
 - Q. And it lists Facebook again at No. 5?
 - A. Correct.
 - Q. And this time it has dropped to 107 hits?
 - A. Correct.
- Q. Do you know if the decrease in the number of hits from September -- or, I mean, from October was in any way attributable to the Thanksgiving break?
 - A. That's one possible explanation.
 - Q. Do you know any other reason?
- A. It's not something I've thought a lot about.
 - Q. Okay. Did you become aware of any call at

Harvard for the development of a Universal Facebook even after you developed yours?

- A. Yes.
- $\ensuremath{\mathtt{Q}}.$ All right. And what was the context that you became aware of?
- A. The Crimson wrote an article, I can't remember if it was connected to Mark Zuckerberg's Facemash creation or not, but it seemed as though students were demanding such an application which I thought I had already created.
 - Q. Did you react to that article?
 - A. Yes.
 - Q. All right. And how did you react?
 - A. I wrote to The Crimson.
 - Q. Did they publish your letter?
 - A. No.

MR. COOPER: Okay.

(Whereupon, Greenspan Exhibit 15 was marked for identification.)

BY MR. COOPER:

- Q. Mr. Greenspan, I just put in front of you a December 11th, 2003, online edition of The Harvard Crimson Opinion "Put on a Happy Face."
 - A. Yes.
- Q. And it begins with the sentence, "After the ill-fated 'facemash' debacle -- where, for a few short-lived hours, students perused their peers' often-unbecoming likenesses online -- it seemed that Harvard students' hopes of a campus-wide, electronic facebook had been dashed."
 - A. Yes.
 - Q. Is this the article you were referring to?
- $\tilde{\text{A}}$. This may have been one of several articles actually; but yes.
- Q. All right. Do you see in the same paragraph, it says, "But, if not for pesky privacy issues, the site's 450 visitors and 22,000 photo-views before being shut down are clear indicators that a campus-wide facebook is in order"?
 - A. Yes.
- Q. All right. And do you have an understanding that Facemash was a program developed by Mark Zuckerberg?
 - A. That is my understanding.
- Q. All right. And then it calls for "a campus-wide facebook is in order"?
 - A. Yes.
- Q. And is that statement one of the statements you reacted to in trying to contact The Harvard Crimson about your own Facebook?
 - A. Yes.
- $\ensuremath{\mathtt{Q}}.$ Did you talk with anybody at The Harvard Crimson?
- A. I exchanged an emails with one of The Crimson's members.
 - Q. Do you know who that individual was?
 - A. I can't remember his name.
- $\ensuremath{\mathtt{Q}}.$ Do you know a person named Andrew Stillman?
- A. It sounds like a familiar name. It may have been the person. $\label{eq:A.}$

MR. COOPER: Okay.

(Whereupon, Greenspan Exhibit 16 was marked for identification.)

BY MR. COOPER:

Q. Mr. Greenspan, I put in front of you a

December 6th, 2003 email.

- A. Yes.
- $\ensuremath{\mathtt{Q}}.$ It's from Andrew Stillman to Aaron Greenspan.
 - A. Correct.
- Q. And it says, "Aaron, thanks for emailing me. I've seen houseSYSTEM'S Facebook, and while it definitely serves some of the needs that the UC is pushing for in our proposed facebook (such as accessibility of IM screen names and cell phone numbers), I think the two are fundamentally different projects."
 - A. Correct.
 - Q. All right. Do you recall this email?
 - A. Yes.
- Q. All right. Can you give me the circumstances for why it was sent to you?
- A. I had sent Andrew Stillman an email the day before because of seeing a third email on the Undergraduate Council mailing list and was surprised that they were not aware that the houseSYSTEM Facebook already existed.
- Q. All right. Did you ever talk with him directly?
 - A. Did I talk with Andrew Stillman directly?
 - Q. Yes.
- A. No. Though I did talk with Rohet Chopra directly.
 - Q. All right. And who is Rohet Chopra?
- A. He was the president of the Undergraduate Council.
- Q. And the Undergraduate Council is the "UC" referred to in the email?
 - A. Yes.
- Q. All right. He indicates, "We are aiming for an opt-out facebook, using Harvard ID photos, while houseSYSTEM is using an opt-in model, with user-submitted photos."
 - A. Correct.
- Q. Did you feel that was an important difference between your own Facebook and the one that the Undergraduate Council was trying to develop?
- A. I thought it represented yet another example of foolishness on the part of the Undergraduate Council.
 - Q. And what was the foolishness?
- A. Making an opt-out facebook through the administration would be much harder than making an opt-in facebook.
 - Q. And why did you think that?
- A. Because I had already tried to work with the administration.
- Q. And had you originally at some point wanted your Facebook to be opt-out?
 - A. No.
- Q. All right. Had you at some point wanted to use at least all of the Facebook photos that were available from the houses?
 - A. No.
- Q. What was the biggest issue you had faced with the administration regarding your Facebook, if anything?
- A. They were concerned about privacy, and an opt-out model inherently implied that people should have their privacy rights ignored and then

considered.

- Q. All right. Who did you talk with at Harvard about this issue?
 - A. Among other people, Jay Ellison.
 - And Jay Ellison was again the house --
 - Allston Burr Senior Tutor. Α.
 - Q. For Lowell House; correct? A. For Lowell House.

 - A. For Lowell House.
 Q. Did you talk with anybody else?
 A. At some point I spoke with

President Summers.

- Q. Was that before or after December 6th, 2003?
 - A. Before.
 - Okay. And what did President Summers say? Q.
 - He was generally sarcastic and unhelpful. Α.
 - All right. Q.

(Whereupon, Greenspan Exhibit 17 was marked for identification.)

BY MR. COOPER:

Q. Mr. Greenspan, I put in front of you the Harvard Undergraduate Council agenda for December 14th, 2003.

Have you ever seen this document before today?

- I may have, but not recently.
- Okay. If you look on page 2, there is an online facebook proposal.
 - A. Correct.
- Q. Do you have an understanding of whether or not this is the online facebook proposal that you were responding to on December 6th to Mr. Stillman?
- A. On December 5th I was responding to an email, and I don't remember what that email said, but I'm sure it was connected to this document.
- Q. Okay. And that's because you were aware that the Harvard Undergraduate Council was trying to develop some type of facebook, a universal facebook?
- A. That was my understanding based on the email that I had read.
- Q. All right. Did you have an understanding whether this proposal was widely known in Harvard?
- A. My understanding of the Undergraduate Council's mailing list was that it was extremely secretive, and although they did produce nominally open documents, such as this one, their website was in such poor shape that it was almost impossible to find them.
- Q. Did you see any similarities between your proposal -- your own existing Facebook, Universal Facebook, and the one proposed by the Harvard Undergraduate Council?
- A. Having just seen this, I'd have to take some time to read it.
 - You can take a moment. Q.

MR. COOPER: Off the record for one

second.

THE VIDEOGRAPHER: Off the record at 3:43. (Off the record.)

THE VIDEOGRAPHER: Back on the record at

3:44.

THE WITNESS: I'm ready when you are. BY MR. COOPER:

Q. Do you see any similarities between the universal online facebook proposal provided by Andrew Stillman and the Universal Facebook that you already had available on houseSYSTEM?

- A. Yes.
- Q. What are those similarities?
- A. The UC apparently wanted to centralize this facebook through the my.harvard portal engine. HouseSYSTEM was a similar, if not alternative, portal.

The listings were searchable and sortable, and did display house and concentration. They did show a student's photo, although the ID photo, concentration and year of graduation and directory contact information.

They also had cell phone numbers, instant messenger screen names. Web pages were not displayed but were asked for. Courses currently previously enrolled in were tracked by the database, student organizations were tracked by the database. There was a quote box. There were a number of similarities.

- Q. And what were the principal differences, if any, that you saw?
- A. All of the differences in the proposal are really tied to the fact that the UC is a semi-official body and they would then be required to go through official channels to make this and therefore use Harvard photographs, Harvard servers, et cetera. Whereas, my efforts were not officially endorsed.
- Q. After your initial email exchange with Andrew Stillman on December 5th, did you have any other communications with him?
 - A. I don't recall.
- Q. All right. Did you have any communications with anybody on the Undergraduate Council after that date?
 - A. I likely did, yes.
- Q. Regarding the facebook, I should say? Universal facebook.
 - A. Regarding the Facebook, I'm not sure.
- Q. And I'm talking about the universal facebook or the facebook proposal by the university.
 - A. I understand. I'm still not sure.
- Q. Earlier you said that at some point you actually came to know Mark Zuckerberg?
 - A. Yes.
 - Q. All right. When was that about?
- A. Beginning in November 2003 I started carrying on an email exchange with Mark regarding I guess the article I had read about him in 15 Minutes about his Synapse MP3 player.
- Q. All right. And beginning in November 2003, did you ever meet with Mark in person?
- A. I met with Mark on January 8th, 2004, for dinner which is the first time I met him.
- $\mbox{Q.}$ $\,$ Is that the same time that you say you also met Dustin Moskovitz?
 - A. Yes.
- Q. Okay. But until January 8th, 2004, you had never met Mark Zuckerberg?
 - A. Not in person.
- Q. Okay. Did you invite Mark Zuckerberg to join Harvard SEC?
 - A. Yes.
 - Q. Did he?
 - A. He never appeared in person.
 - Q. Did he register to the Harvard SEC email

group?

- A. Not to my knowledge. He did register for houseSYSTEM, of course.
- Q. Okay. And that's reflected in the logs that we saw earlier?
 - A. Yes.
- Q. All right. Did there come a point in time when you started talking with Mark about development of a web application?
- A. There came a point in time when Mark started talking to me about the development of a web application.
- $\ensuremath{\mathtt{Q}}.$ All right. Do you know when about that was?
- A. I don't recall precisely, but I thought it was around December of $2003\,.$

MR. COOPER: Okay.

(Whereupon, Greenspan Exhibit 18

was marked for identification.)

BY MR. COOPER:

Q. Mr. Greenspan, I put in front of you an email from Mark Elliott Zuckerberg to Aaron Jacob Greenspan dated Tuesday, June 6th, 2004.

Do you see this?

- A. Yes.
- Q. And in the first sentence Mark Zuckerberg states, "Aaron, I was thinking of making a web app that would use the Harvard course catalog, but I'm a little worried about the university getting upset after the whole Facemash episode."

Do you see that?

- A. Yes.
- Q. All right. And "web app" stands for web application; correct?
 - A. Yes.
- Q. Was this the web app that you were just referring to yourself?
 - A. I believe so.
- Q. All right. Is this the communication that you recall having with Mark about it? The first communication?
 - A. I believe so.
- Q. All right. Do you see where he says, "I know you used info from the catalog in your Shopping List Scheduler in houseSYSTEM (which is awesome by the way), so I was wondering if you had to get permission to use the material, and if so, who you contacted."
 - A. Correct.
- Q. All right. The Shopping List Scheduler is the Shopping List Scheduler you said you thought would be probably the most popular function of houseSYSTEM; correct?
 - A. Correct.
- Q. All right. And by the content of this email it suggests that Mark had seen your site by then?
- A. Both that he had seen it and thought it was "awesome."
- Q. Okay. Did you have any discussion with him about this inquiry?
 - A. Yes.
- $\ensuremath{\mathtt{Q}}.$ All right. What was the nature of that discussion?
- A. We discussed where I had obtained the data and why he wanted it.

- And where had you obtained the data?
- As I said before, from the Harvard Α. Registrar's website.
 - Q. Okay. And did you tell Mark that?
 - I believe so. Α.
 - All right. Did you do so by email? Q.
 - Α.

(Whereupon, Greenspan Exhibit 19 was marked for identification.)

BY MR. COOPER:

- Q. Mr. Greenspan, I put in front of you a January 6th, 2004, email from Mark Zuckerberg to you which also includes an email from January 6th, 2004, at the bottom from you to Mark; correct?
 - Correct. Α.
- And you inquired, "What kind of app were Q. you thinking of"; correct?
 - A. Yes.
- Q. And you were wondering if you could integrate it into houseSYSTEM?
 - A. Correct.
- Q. Mark Zuckerberg responded, "I actually did think about integrating it into houseSYSTEM before you even suggested it but decided that it's probably best to keep them separated at least for now." Correct?
 - Correct. Α.
- Did you have an understanding what the Q. application was that Mark was developing?
 - A. I had some guesses.
 - What were your guesses? Q.
- I guessed that he was making a Friendster Α. for Harvard.
- Q. And what do you mean by "a Friendster for Harvard"?
- A social network that allowed you to explicitly list your friends and coordinate that by what he had asked for, or based on what he had asked for, with the list of courses at Harvard.
- Q. Why did you have that suspicion?
 A. He had already made a CourseMatch and Facemash, which combined, seemed to lead in that direction.
- Q. All right. And why do you think they led in that direction?
- A. I don't know why I thought that. That just seemed to be the obvious thing that he would make next.
- Q. As of January 6th, 2004, had you ever signed up for Friendster?
 - A. No.
 - Q. Have you ever seen it?
 - I believe I'd seen it once. Α.
- Q. All right. What was the context in which you had seen it?
- A. A friend of mine told me about it and I went to the website and looked at it.

(Whereupon, Greenspan Exhibit 20 was marked for identification.)

BY MR. COOPER:

Q. Mr. Greenspan, I put in front of you some archived web information from www.friendster.com from December 2003 from the Internet Web Archive.

Are you familiar with that tool?

- Α. Yes.
- All right. If you take a look just Q.

generically through the pages that are placed in front of you, does this look like the site Friendster as you understood it to exist in or about December of 2003?

- A. Yes.
- Q. Okay. And it allowed friends to connect with other friends; correct?
 - A. Yes.
- Q. You used the word "social network." What do you understand a social network to be?
- A. In an academic sense, any representation of your connections to other people, whether in a paper or digital format, whether that's a diagram or a table.
- Q. All right. Did you consider your houseSYSTEM to be a social network?
 - A. No.
- Q. All right. Is that because it didn't have the ability to link friends?
 - A. Yes.
- Q. Was that a pretty important feature for it to be a social network?
 - A. Yes.
- Q. All right. Did you ever have the thought of exporting houseSYSTEM or something like it to other universities?
 - A. Yes.
- Q. All right. When did you have that thought?
 - A. August 1st, 2003.
- Q. All right. That was your intent from the beginning?
 - A. Yes.
- Q. All right. Did you make any effort to actually export it to other sites? Other colleges, I should say.
 - A. Much later, yes.
- Q. All right. During the period between August 1st, 2003, and February 1st, 2004, did you make even any preliminary efforts to see if it could be exported to other universities?
 - A. No.
- $\ \mbox{Q.}$ All right. But it was at all times your intention to do so?
 - A. Yes.
 - Q. All right. Did you tell people that?
 - A. I told at least one other person that.
 - Q. Who was that other person?
 - A. My father.
- Q. Okay. Do you have any recollection of telling any of your friends?
 - A. Yes.
 - Q. Okay. But you don't recall which friends?
- A. There's a good chance it was two or three of my closer friends.
- Q. Okay. And that would have been before February 1st, 2004 as well?
 - A. Yes.
- Q. All right. Did you have a sense of turning it into anything like a social network if you exported it to other colleges?
- A. Once I was out of Harvard and no longer subject to the whims of the administration, I entertained that as a possibility, but not while I was under threat of being kicked out of the school.
 - Q. Okay. Did you continue to have

communications with Mark Zuckerberg after he sent you the email about the web application?

A. Yes.

MR. COOPER: All right. (Whereupon, Greenspan Exhibit 21 was marked for identification.)

BY MR. COOPER:

Q. Mr. Greenspan, I put in front of you an email exchange between you and Mark Zuckerberg again dated January 6th, 2004.

In the first of them you write to Mark saying, "I had to enlist the assistance of three lawyers in order to avoid Harvard following through on its repeated threats of 'disciplinary action,' but those threats don't relate to the course list at all."

- A. Correct.
- Q. All right. So that was your advising about other issues that had arisen with respect to houseSYSTEM; correct?
- A. I was advising him about issues related to Facemash, actually, based on my own experience with houseSYSTEM.
- Q. Well, what I meant is: When you said you enlisted "the assistance of three lawyers in order to avoid Harvard following through on its repeated threats of 'disciplinary action,' but those threats don't relate to the course list at all," it was a reference to the fact that the dispute that necessitated your having three lawyers had nothing to do with your being able to identify course lists for houseSYSTEM; correct?
 - A. Correct.
- Q. And, in fact, in this email you indicated that you just imported the list from the Registrar's site and put it in a table after some crazy string parsing?
 - A. Correct.
- Q. So that was taking the information available from the public Harvard site about all course materials and then parsing it into your database table; correct?
 - A. Correct.
- Q. And then having the "string parsing"; meaning that you had to make some adjustments for linking the information; correct?
 - A. Yes.
- Q. All right. And then you say, "I'm sure you'd have no trouble doing the same, but you'll quickly find that Harvard's Oracle backend for courses is really a piece of crap."

"Harvard's Oracle backend" is a reference to Harvard's own database; correct?

- A. Yes.
- Q. All right. In his response to you he says -- Mark says, "I actually already have that stuff parsed and if you ever need it, just let me know."
 - A. Yes
- Q. And that's the course information he's referring to; correct?
 - A. Yes.
- Q. And that's actually consistent with his having created CourseMatch; correct?
 - A. Yes.
 - Q. All right. And then he says, "I know

you have a version of it since you're using it for houseSYSTEM, but if you need one with course descriptions and pre-reqs, I can give that to you if you're interested and don't already have those fields."

- A. Correct.
- Q. All right. So in the CourseMatch that had been prepared by Mark, he had course descriptions made available; correct?
 - A. Apparently.
- Q. And he had also identified prerequisites for the courses; correct?
 - A. Yes.
- $\ensuremath{\mathtt{Q}}.$ And did you have that information on house SYSTEM?
 - A. No.

(Whereupon, Greenspan Exhibit 22 was marked for identification.)

BY MR. COOPER:

- Q. Mr. Greenspan, I put in front of you another pair of emails from January 6th, 2004, in which in the first one you state, "Mark, very interesting. That might actually be useful."
 - Do you see that?
 - A. Yes.
- Q. And that's a reference with his providing you with the prerequisite and course description information; correct?
 - A. Yes.
- Q. And then you invite him to keep houseSYSTEM going; correct?
 - A. That is correct.
- Q. All right. And then in the first sentence above it says, "I'm definitely considering joining SEC and I still want to come to a meeting sometime when I get a chance." Correct?
- A. He says he's definitely considered it, yes.
- Q. All right. And, again, that's consistent with your recollection that he actually never made a meeting; correct?
 - A. Correct.
- Q. He then says, "The general problem I have with these things is I don't...have a long attention span for lots of coding."
 - A. That is what he claims.
- Q. All right. And then he says, "I like coming up with ideas and implementing them quickly, which is why I've stuck mostly to web development recently."
 - A. Correct.
- Q. Did you have an understanding of what web development he was referring to?
- A. My best guess was CourseMatch and Facemash.
- Q. Did you after this email exchange have any -- you said you had meeting with him and Dustin Moskovitz on January 8th, 2004?
 - A. That's correct.
 - Q. What was the substance of that meeting?
- A. We discussed our own experiences with the Harvard administration. We discussed houseSYSTEM. We discussed his secretive project that he was keeping on the "DL," as he put it, and had dinner.
- keeping on the "DL," as he put it, and had dinner.
 Q. All right. Did he put it, say, "on the
 DL" in an email, if you know?

- A. Both verbally and in the email that has that verbiage.
- Q. And did he give you details about what was the -- and "DL" stands for download?
 - A. That's my understanding.
- $\ensuremath{\mathtt{Q}}.$ And did he give you any information about it?

MR. FURBUSH: What does that mean?

MR. COOPER: Download.

THE WITNESS: It's a colloquial way of saying keeping it confidential.

MR. COOPER: Welcome to the world of computer speak.

MR. FURBUSH: Okay.

THE WITNESS: Not all computer engineers speak like that, I'll have you know. BY MR. COOPER:

- $\ensuremath{\text{Q.}}$ I understand. But I also know many who do.
 - A. Sure.
- Q. And you're referring to Exhibit 19; correct?
 - A. Yes.
- Q. And in that it says, "For now I'm trying to keep the project on the DL so I rather not disclose the details, but we can definitely speak about it once I'm ready to release it."
- A. Yes. He said he rather not discuss the details.
- Q. But you had already created a surmise that it was a Friendster-like environment for Harvard?
- A. I asked him in person, point blank, "Is it a Friendster for Harvard?" And he said he could not tell me.
- Q. All right. But by January 8th you already had your suspicions?
- A. By January 6th I already had my suspicions.
- Q. Okay. But when you asked him point blank $\ensuremath{\text{--}}$
 - A. Yes.
 - Q. -- so...
 - A. Yes.
 - Q. Did he say why he couldn't tell you?
 - A. No.
- Q. All right. Did you have -- did you gain any other information about the project he was working on?
- A. Only that he thought it would be cool and that he thought it would relate to graph theory.
- $\ensuremath{\mathtt{Q}}.$ And by "graph theory" what did you understand that to mean?
- A. The underlying academic theory behind social networks where you --well, behind social networks and other kinds of networks in which there are nodes that have to link to each other.
- Q. Okay. And, again, that's like a friend connection; correct?
- A. That could be one example of a node where each node is effectively a person and connections between nodes are friendships.
- Q. All right. Did Dustin Moskovitz say anything about the project?
 - A. He was very quiet the whole time.
- $\ensuremath{\mathtt{Q}}.$ All right. How long did this conversation last?

- A. Approximately an hour.
- Q. All right. Was it devoted specifically to the subject of the project on the DL?
- A. As I said, we discussed the Harvard administration houseSYSTEM and Mark's project.
- Q. Did he talk about any project he was doing for anybody else at the same time?
 - A. No.
- Q. All right. Did you have any conversations with him after January 8th and before February 4th, 2004?
 - A. I believe I did.
 - Q. Do you know when that was?
 - A. No.
 - Q. Do you know the circumstances?
- $\ \mbox{A.}\ \mbox{We talked with moderate frequency on AOL Instant Messenger.}$
- Q. Okay. But did you discuss the project he was working on?
- A. During that time frame, I don't know. If we had discussed it, he would not have been telling me that that's what we were discussing.
- Q. Did a period of time come where you realized the project on the DL was Facebook?
 - A. As soon as it launched, yes.
- Q. And was the project as it launched consistent with what you had suspected he was working on?
 - A. Entirely.
 - Q. And it was a social network; correct?
 - A. Yes.
- Q. What differences existed with the Facebook as it launched and your Universal Facebook as it existed in the fall?
- A. One difference was that the Facebook that Mark created was a standalone product not integrated with other features at the time that it launched. Its visual interface was much different than houseSYSTEM'S. Its code was in pretty poor shape, as I recall, and was not very efficient.

There were more fields for people to work with and there was a difference in focus in that while I was trying everything I could to not focus on people, Mark had devoted everything to focusing on the personal profile.

- Q. And you said, "Its code was in pretty poor shape." Was that from doing a right click and looking at the see source or show source?
- A. No. That was just from seeing the URLs that were generated when you clicked on links.
- Q. All right. You say "there was a difference in focus." What do you mean?
- A. As I said, houseSYSTEM, because of privacy issues, was not designed to focus on personal profiles. Facebook was.
- Q. Did you think Facebook was similar to Friendster?
 - A. Yes.
- $\ensuremath{\mathtt{Q}}.$ All right. In what ways was it similar to Friendster?
 - A. There were personal profiles.
- $\ensuremath{\mathtt{Q}}.$ All right. And were they also both friend links?
 - A. Yes.
- Q. All right. And Friendster, you would agree, is a social network?

- And when you told Mark -- when you asked Q. Mark if it was going to be a Friendster for Harvard, did you have an understanding he knew what you meant by "Friendster"?
 - A. Yes.
- Q. Okay. What other similarities did you see between it and Friendster; Facebook as it launched?
- A. Both had the potential for gross privacy violations, in my opinion.
 - Q. What similarities in terms of content?
- I didn't spend a lot of time looking at the content on Friendster except for my one friend's profile so I really couldn't say beyond the typical fields you see on social networks, which are name, perhaps birth date, hometown, et cetera.
- Q. And would you agree it's often frequently on social networks to have email addresses listed?
 - A. Yes.
- Q. When Facebook launched, it was confined to allowing you to use a harvard.edu address?
- A. Correct. Q. Did you become aware that it expanded to other colleges?
 - A. At some point in time.
- How soon did you yourself ever sign up to Facebook after it launched?
 - A. Approximately one or two hours.
- Okay. How did you find out about its Q. launch?
- I received an email from Rodica Buzescu relaying an email to the Harvard UAs, which were user assistants, talking about Facebook's launch and the fact that it was already lined up for Crimson coverage.
- Q. All right. Did you have an understanding how it was lined up for Crimson coverage?
 - A. No.
- All right. Was there a time when the site Q. was in fact covered by Crimson?
 - A. Several.
- All right. And was it pretty immediately Q. after its launch?
 - A. To the best of my recollection, yes.
- Q. All right. Did you continue on to develop your own site?
 - A. I developed several websites after that.

Q. Let me rephrase.

Did you continue to try and further develop the Universal Facebook after launch?

- A. Yes.
- And you said earlier there were some O. features that you even added as a result of Facebook's popularity; correct?
 - A. Correct.
 - Including the linking to friends? Q.
 - Correct.

(Whereupon, Greenspan Exhibit 23 was marked for identification.)

BY MR. COOPER:

- Q. Do you know the date you launched your own -- the FaceNet?
- A. I don't recall exactly.Q. FaceNet was simply a modification of the Universal Facebook; correct?
 - A. Correct.

Q. All right. And this article -- I put in front of you as Exhibit 23, a March 19th, 2004, email -- or article, the online edition of The Harvard Crimson.

Do you see this?

- A. Yes.
- Q. Do you recall reading this?
- A. Yes.
- Q. And it says, "Earlier this week," the week of March 19th, 2004, "Aaron J. Greenspan '06 launched FaceNet, a website providing Harvard affiliates with services similar to those offered by the facebook.com, a popular site that has already attracted more than 7,000 students and alumni through friendship networks."
 - A. Correct.
- Q. As of the date that Facebook launched, February 4th, 2004, approximately how many users were there of the houseSYSTEM?
 - A. 1,438.
- Q. All right. And you're again looking at Exhibit 9, correct, to ascertain that number?
 - A. Yes.
- Q. So that's because again it's chronological so you can make an estimation by the user ID as of the February 4th date; correct?
 - A. Correct.
- Q. So there were 1400 users of the houseSYSTEM. That's about one-quarter of the population of the Harvard undergraduate body; correct?
 - A. Correct.
- Q. How many of those do you have an estimation were familiar -- how regularly did you see hits on your Universal Facebook site before Facebook launched?
- A. There would be a lot of traffic at the beginning of each semester, but not as much for the rest of the time.
- Q. Okay. On this March 19th, 2004 article there's a quote from Zuckerberg's roommate Christopher R. Hughes.
 - A. Correct.
- $\ensuremath{\mathtt{Q}}.$ And it says he did not view FaceNet as a competitor?
 - A. Apparently.
- $\ensuremath{\mathtt{Q}}.$ Did you ever talk to Chris Hughes about that comment?
 - A. No.
- \mathbb{Q} . Do you have any reason to doubt his view on that?
 - A. Yes. He was a spokesman.
- Q. All right. Well, do you see where it says, "'We don't really have an attitude of competition,' Hughes says, 'I have seen the FaceNet website and it looks fine.'"
 - A. Correct.
- Q. And then he says, "'It looks like an interesting website. But we are not worried or competitive. That's not our attitude at all.'"
 - A. Correct.
- Q. Did you see any effort by Facebook's founders in any way to undermine FaceNet?
- A. It depends what you mean by "undermine," but I did get a competitive vibe from Mark.
 - Q. Okay. But you would agree that their

public statement here actually doesn't even criticize your site?

> I would agree with that. Α.

BY MR. COOPER: He has to go off the

I would say five minutes and then I'm done. record. Is that okay with everybody?

THE VIDEOGRAPHER: This marks the end of

tape 3 in the deposition of Aaron Greenspan.

Off the record at 4:14.

(Off the record.)

(Whereupon, Greenspan Exhibits 24, 25, 26, 27, 28 and 29 were marked for identification off the record.) THE VIDEOGRAPHER: This marks the

beginning of tape 4 in the deposition of Aaron Greenspan.

On the record at 4:29.

BY MR. COOPER:

Mr. Greenspan, we're going to go quickly Q. through.

We previously marked during the break Exhibit 24. It's the usage statistics for www.kirkland.harvardsec.org for December 2003.

- Α. Correct.
- This is the same type of usage statistics for houseSYSTEM that we saw for September, October and November; correct?
 - A. Correct.
- And once again on page 1261, beginning on 1261 extending to 1262, it lists the top 27 of 623 total URLs that were hit during the month of December 2003 on houseSYSTEM?
- A. Correct. Q. And, again, it lists Facebook at 5 at 107 hits?
 - Yes. Α.
- Q. On Exhibit 25, it's the same statistics generated by you, as I understand it, for January 2004?
 - Α. Yes.
- All right. Generated by your company at Q. your behest for January 2004?
 - A. Yes.
- All right. And for January 2004, the Q. top 30 of 1,012 URLs on page AG1271 reflects again Facebook --
 - Α. Yes.
 - -- in the fifth position with 106? Q.
 - Yes. Α.
- And Exhibit 26 is the same information, yet again usage statistics for www.kirkland.harvardsec.org for February 2004?
 - A. Yes.
- And this would be for the period Q. immediately following the launch of Facebook?
 - A. It would include that period, yes.
- All right. And the top 30 of 1985 URLs Q. on page 1282 to 1283.
 - A. Yes.
- And it shows that Facebook is now dropped to No. 8 with only 68 hits?
 - A. Correct.
- Q. Did you see a loss of interest in the Universal Facebook immediately following the launch of Facebook by Mark Zuckerberg?
 - A. I would not say immediately following,

given that there was already not that much interest in the Facebook that I had created. But generally speaking, yes.

- Would you look at Exhibit 27. Q.
- Yes. Α.
- Is this a document you generated? Q.
- It is a similar statistical document from exhibits 26, 25, et cetera.
- Q. Is it generated from the same user information available on the New Jersey server that was --
- Yes. It's part of the same program, in Α. fact.
- All right. Can you just tell me, is this information that's shown on Exhibit 27 limited to www.kirkland.harvardsec.org?
- A. Yes. Though most of the graphs in this particular document appear to be completely meaningless.
- Q. But whatever information is in here should also be the same information that's, for instance, in Exhibit 26?
 - A. Yes.
- Q. You created an online book as a result of your experiences from Harvard?
 - A. I wrote a book; yes.
- All right. It's available from your Q. website; correct?
- The first chapter is presently available; Α. yes.
- Q. And at previous times the whole volume was available; correct?
 - A. Correct.
 - And it's called "Authoritas"? Q.
 - Α. It's called "Authoritas," yes.
- Q. And that's a play on Harvard's choice of its shield word "Veritas"?
 - A. It is a play on Harvard's motto.
- All right. In this book do you describe your discussions with Mark Zuckerberg?
 - A. Yes.
- Q. All right. If you turn to page -- does this appear to be a version of Authoritas as it existed previously on your website?
 - A. At one time, yes.
- And has it been further modified in the Q. time since it was available on your website?
 - A. Yes.
- Q. Is it being published by anybody, do you know?
 - I don't know.
- Has it been -- and you don't have to give me details. I just want to know: Has it been submitted to a publisher?
 - A. Yes.
- Q. Okay. But you do agree at an earlier time I was able to download this version of the book?
 - A. Yes.
- All right. In whatever version -- at whatever point in time this version exists, can you turn to 1784.
 - A. Yes.
- You have a paragraph at the start, it says, "In addition to financing, Mark also attracted a lawsuit from the founders of a website called ConnectU, a dating site run by several Harvard

undergraduates who hired him to design and program their project in the fall of 2003."

- Correct. Α.
- How did you know that their site was a Q. dating site?
- A. It had been covered fairly extensively in The Crimson and other media outlets.
- Q. Okay. In the final sentence of that paragraph it says, "ConnectU eventually diversified, branching into the used textbook exchange marketplace with the web page form whose user interface exactly matched houseSYSTEM'S."
 - A. Correct.
- All right. And that's the Jungleloo web Q. page you were telling me about earlier?
 - A. Yes.
- Q. And then it says, "One of ConnectU's three founders as well as its programmer were houseSYSTEM members."
 - Α. Yes.
 - Q. Are you referring to Cameron Winklevoss?
 - As one of the three founders, yes.
- Q. All right. And was the programmer Victor Gao?
 - A. Yes.
- Q. And how did you know Victor Gao was a programmer associated with ConnectU?
- A. Once again, ConnectU has been covered both in The Crimson and other media outlets.
- Q. All right. But it wasn't because of personal knowledge?
 - A. No.
- Q. All right. Earlier this fall did you discuss the events of surrounding the development of houseSYSTEM and its Universal Facebook with The New York Times?
 - A. Yes.
- Q. All right. Looking at Exhibit 29, is that a copy of the article that resulted from The New York Times as a result of your discussion?
 - A. Yes.
- Q. There's a quote attributed to you on the second page of the article.
- A. I'm sure that's true.
 Q. It says, in the third full paragraph on page 2 of 4, "In an interview at a cafe here this week, Mr. Greenspan said that he had mostly made peace with the fact that Mr. Zuckerberg will be the first of his classmates to become a billionaire."
 - It says that. Α.
- Did you in fact express that sentiment to The New York Times reporter?
- A. When he asked me if I would be okay with the idea that Mark Zuckerberg would be the first of my classmates to become a billionaire, I said something to the effect that I had gotten pretty used to that idea.
- Q. Okay. And then there's another -- below that, a couple paragraphs below, there's a quote, "'I've had a long time to think about this and I'm not as bitter as I was a year ago, 'Mr. Greenspan said."
 - Correct. Α.
- Do you believe that's an accurate quote Q. from you?

- Q. And is it fair to say you are not bitter about any of the events -- or as bitter as you were in the past about the events surrounding houseSYSTEM as it relates to Facebook?
- A. I think I meant exactly what I said, that I'm not as bitter as I was a year ago.
 - Q. Would you consider yourself still bitter?
- I don't know how somebody can go through all this and not come out bitter.
- Q. Is that specifically related to Facebook or is it related to many of the other issues that were associated with houseSYSTEM?
- A. Well, the issues associated with houseSYSTEM were bad enough. Facebook made them worse.
- Q. Okay. Do you have any plans to sue Mark Zuckerberg about the development of Facebook?
 - A. I don't know.
- Q. Do you believe that Facebook employs any of your ideas?
 - A. Yes.
- All right. Do you believe it employs its own original ideas as well?
- A. I would have no knowledge of that, but I think it might.
 - Okay.

MR. COOPER: I believe that's all for me. Of course we should make sure that Nathan doesn't have any questions, or stipulate on the record he doesn't.

MR. SHAFROTH: Are we still on?

THE VIDEOGRAPHER: Yes.

MR. SHAFROTH: I don't have any questions. THE WITNESS: I don't have any answers.

EXAMINATION

BY MR. WALLERSTEIN:

- Q. Good afternoon, Mr. Greenspan.
- Good afternoon. Α.
- Q. My name is Tom Wallerstein and I represent the plaintiffs in this case, in case you didn't pick that up earlier.

You've had your deposition taken before?

- I have.
- What was that about? Q.
- It was regarding a trademark opposition in the United States Patent and Trademark Office.
 - Q. And when was that?
 - Α.
- From January of 2002 through May of 2004. Can you date your deposition any more Q. precisely?
 - I'm sorry. Can you say that again? Α.
- Can you date your deposition any more Q. precisely?
- A. Oh, it would have been over the summer of 2003; I believe it was June 25th, 2003, I think.
 - Q. Do you currently write any blogs?
 - I don't have a blog, but I do write.
- Q. What do you mean by that?
 A. Well, I've written a book. And I occasionally write other essays, but I don't have a blog.
 - Q. Do you publish the essays in any way?
 - Sometimes I do. Α.
 - How so? Q.

- I do a personal website. I think of a blog as being a collection of very short, day-to-day activities, but I do have a collection of things I've written publicly available.
 - On your personal website? Q.
 - Α. Yes.
 - What's that website? Q.
 - Α. www.aarongreenspan.com.
- Any other websites that you've published Q. any writings on?
- A. I have on occasion written white papers through Think Computer Corporation which talk about computer-related issues, such as security, but I don't think that beyond those I have any publicly-available writings that are not published through some sort of a newspaper or other publication.
- Q. When you were writing Authoritas, were you keeping a journal?
 - Α. No.
- Was there any other document that you used that became Authoritas?

MR. FURBUSH: Objection. Vague. THE WITNESS: I don't understand the question.

BY MR. WALLERSTEIN:

- Q. How did you write Authoritas; the method?
- I decided in August of 2000 -- I think in '3 -- oh, no, I'm sorry, August of 2004 that I wanted to start writing a book and I began typing in Microsoft Word. And I got the first 80 pages down, revised it, moved on to the next segment of the book and repeated until I had something that I thought was a full story.
- Q. So in Authoritas, for example, you describe a January 2004 meeting at Kirkland House that you've testified about earlier today, and you have quotations from things that were said at the meeting.

You started Authoritas in August 2004?

- I believe that's correct, yes.
- So those quotations were from your memory? Q.
- Yes. Α.
- Did you have any written memorialization Q. of, for example, that conversation?
- A. Of that particular conversation, no. Of other conversations that are described in the book, yes.
 - What were those other memorializations?
- For example, my conversation with Larry Summers were written down based on my memory immediately after the conversation.
 - Q. When was that conversation?
 - A. October of 2003.
- Q. So in October of 2003, you had a conversation and then you memorialized that conversation somewhere?
 - Yes. Α.
 - Where was that? Q.
 - Α. On a file on my computer.
- Q. What was your purpose of doing that?
 A. Larry Summers is a prominent individual. He had treated me in a way which I found, frankly, to be repulsive and I did not want to forget about it.
 - Did you ever memorialize any conversations

you had with Zuckerberg prior to August 2004?

- A. Some of the conversations I had with Mark were conducted in writing to start with. So I did not actively memorialize them, but by virtue of their medium they were already in writing.
 - Q. Beyond those?
- I don't recall writing down any of Α. the personal conversations I had with him, but the things that I have quoted from during that conversation are actually fairly limited in the scope of an hour long conversation and I remember them quite well.
- Q. I think you testified you have never met Cameron Winklevoss.
 - A. I don't believe so.
 - And you've never met Tyler Winklevoss? O.
 - The same applies. Α.
 - Q. And you've never met Divya Narendra?
 - I don't think I have. Α.
- And prior to -- at any time have you Q. exchanged written correspondence with any of those three gentlemen?
 - A. Not directly.
 - Q. Indirectly?
- A. It's possible that they were on a mailing list for one of my classes and something I wrote was delivered to them, but not directly.
- Q. At the January 8 meeting, 2004 meeting, that you described earlier today and in your book with Zuckerberg at Kirkland House, the meeting was about an hour long?
- A. Give or take a few minutes, I would estimate it at an hour.
- Q. And how long into the meeting was it before Dustin Moskovitz appeared?
 - A. He was there the entire time.
- Who got there first? Did you get there Q. first or did they?
 - A. I don't remember. I think I did.
- Okay. And so then when Zuckerberg shows up, he was with Dustin Moskovitz?
 - Yes. Α.
 - Did that surprise you? Q.
 - Α. No.
- And then when you had your conversation with Zuckerberg, Moskovitz was part of that?
 - A. Yes.
- And so he heard everything that both of Q. you said presumably?
- A. Unless he was blocking his ears, he did hear it. I don't know if he remembers it.
- Q. At that conversation was there any mention of Harvard Connection?
 - A. No.
 - And was there any mention of ConnectU? Q.
 - Α. No.
- Q. When Zuckerberg discussed the DL project he was working on, did he tell you that he was working on that project with Moskovitz?
- A. The way he put it was that his roommate Dustin was helping him out.
- Q. And you didn't have any other meetings with Zuckerberg at Kirkland House; right?
- A. If I did have meetings with Zuckerberg after that, they were mostly related to the independent study we were taking together.

- What was that?
- Computer Science 91r which was focused on Α. voice recognition using PHP.
- Q. Did there come a time when you came to believe that Zuckerberg had been working with Cameron, Tyler or Divya on a web app?
- A. No. Not until I read about it in the newspaper just like everybody else.
- Q. Is everything in Authoritas true?A. To the best of my knowledge it has gone through revisions based on feedback from people I know and I've stressed to them that I wanted feedback to ensure its accuracy. The draft that has been produced here, which I strongly object to having in the public record, is old and therefore probably less accurate than the latest draft.

MR. WALLERSTEIN: I don't think it has been designated confidential so perhaps you may want to...

MR. COOPER: We can talk about that off the record.

MR. WALLERSTEIN: I'm sorry. I thought they had produced that.

MR. COOPER: It was produced in the case back when it was downloaded which was sometime back.

MR. FURBUSH: To the extent you have the ability to designate it as confidential, we'd like to do so.

MR. COOPER: Okay. I'll have to inform multiple parties. I can't guarantee who has and hasn't seen it. I believe it was produced a long time ago. I'm not sure. But I'm happy to convey that request on to all parties.

MR. FURBUSH: If I can just explain. The main concern is that Mr. Greenspan is -- he would like to publish this as a book that people will pay for. And, you know, it would be -- it would undermine efforts to get the book published and to have, you know, successful sale of the book to have this thing floating around.

MR. COOPER: We understand that. I'm not opposed to doing whatever we can. He is protected by copyright. And one thing that may put everyone at ease -- I don't believe we can under the protective order use this for any purpose other than the case. So that at least in its own -- it hasn't even been discussed in any depo or any other matter until today so...

I mean, I'm happy to talk with you and all counsel about it later. It's just I can't deny that this was downloaded from a public site at the time it was, and I don't know who has seen it and who hasn't, but it isn't a situation where anybody is trying to exploit --

MR. FURBUSH: Okay. Well, just so it's clear. Again, we don't need to take up your time on this, but Mr. Greenspan is not giving permission to people to keep duplicating this and passing it around. Okay. And to the extent that he has copyrights or any other right to, you know, prevent that, he would like to invoke those rights. He's not waiving them.

MR. COOPER: Yes, I understand. I don't think anybody is going to give him any grief about it.

MR. FURBUSH: Okay.

BY MR. WALLERSTEIN:

- Q. Mr. Greenspan, you don't plan on making any further edits to Authoritas? In other words it's complete; correct?
 - Α. No.
- I'm sorry. The question was vague. Q. Do you plan on making any further edits to Authoritas?
 - A. Possibly.
- Q. Have you made edits to the version of Authoritas that has been produced here today regarding your conversation at Kirkland House?
- A. I think I may have inserted some material, but not extensively.
- Q. What was the source of the new material you inserted?
 - A. My memory.
- And that current version you're describing, that has not been produced and is not available to us?
 - A. Correct.
- I want to talk about houseSYSTEM in its Q. earlier inception, say, as of October 1, 2003. At that time, why did you -- why was it necessary for someone to submit an .edu email address?
- A. The reason that we restricted it was so that we would only get Harvard students signing up because we did not want outside users to use the site.
 - Why not? Q.
 - Mostly because of privacy concerns. Α.
 - Would that include potential employers?
 - Α.
- Inevitably, yes.
 So for the job posting function, for Q. example, your contemplation, at least as of October 2003, was that those people were posting their resume to be accessed by potential employers who were also Harvard students or alums?
 - Who were also Harvard alums, yes. Α.
- And did you have any -- well, the site as of October 2003 was not generating revenue; correct?
 - A. Correct.
- At that time did you have any plan to generate revenue with the site?
- A. Yes. By opening it to other schools, I thought those school administrations might be willing to pay for the use of the software or we might be able to sell advertising on the site.
- Q. Did you memorialize those intentions anywhere?
- Well, we did sell advertising on the site at some point. But the plans to open it to other schools didn't really materialize until I graduated and was working in Boston in 2005, at which point I think I wrote a letter to the head of Yale's IT department.
 - Q. When did you begin selling advertising?
 - March of 2004. Α.
 - Did you ever consider charging user fees? Q.
 - Α. No.
- As of October 2003, was it possible using houseSYSTEM to send messages through the system to other users?
- A. Indirectly through first FASt web mail and then the official FAS web mail system, yes.
 - Q. How about through any proprietary

houseSYSTEM function?

- A. No. Not except for the message board which would have been to a user but also to every user.
- Q. And as of October 2003, was there any functionality in houseSYSTEM that allowed users to upload their thesis?
- A. There was no feature for theses specifically.
- Q. Were there features that allowed users to upload -- other than photographs, upload other information that could include a thesis?
 - A. Not in October of 2003.
- Q. And in October 2003, was houseSYSTEM open to faculty?
 - A. I believe so.
- Q. And, in any case, it was open to faculty at some point or prior to January 2004?
 - A. Yes.
 - Q. Do you know Luke O'Brien?
 - A. I believe he's a reporter.
 - Q. Have you spoken to him?
 - A. Yes.
 - Q. Did you tell him that you know

Mark Zuckerberg as dishonest?

MR. COOPER: Objection to form.

THE WITNESS: I don't know what that

means.

 $$\operatorname{MR}.$ COOPER: It means you can go ahead and answer despite my objection.

THE WITNESS: Okay.

MR. WALLERSTEIN: Can you clarify your objection, Counsel?

MR. COOPER: You asked him did you tell him that you know Mark as dishonest. The question, as I read it, is are you asking him attributing a hearsay statement or are you asking him if that was a statement he made?

 $$\operatorname{MR}.$$ WALLERSTEIN: Thank you. Let me rephrase it.

BY MR. WALLERSTEIN:

- Q. Did you tell Mr. O'Brien words to the effect of "I know Mark Zuckerberg as dishonest"?
 - A. Yes.
- Q. And did you tell Mr. O'Brien words to the effect, "I've seen him"; meaning Zuckerberg, "lie"?
 - A. Yes.
 - Q. What were you referring to?
- A. Specifically a speech that he gave at Stanford I believe sometime in 2005 as part of the ETL forum in which he explained how he created Facebook in response to a question that was asked to him, "Why did you create Facebook?" or something to that effect.

And he said, "Harvard did not have a Facebook so I made it."

That's a paraphrasing of what he said, but it was clear that his memory had failed him or he was lying, and I don't think his memory had failed him.

- Q. Do you have any other reasons to believe that Zuckerberg is dishonest?
 - A. Several.
 - Q. Such as?
- $\tilde{\text{A}}.$ The fact that I am presently involved in litigation against him by at least one party. Also

the way that he communicated with me when I knew him personally in 2003 and 2004 often stopped short of lying but was conducted in such a manner as to be evasive on a fairly frequent basis. Also statements he made during the CS 91r course were frequently at odds with actions he took which made me sometimes question his true motives.

- Q. Can you give me an example of that?
 A. He would often claim to be working very hard on something and then not turn it in. He would not show up to class often, which is, to be fair, something that a lot of students do. But in a 10-person seminar it was pretty noticeable.

He also would say things like: I have a friend who is setting up 10 servers at a data center and needs to know how to do such and such.

And I would ask him, "Who is your friend?" and he would avoid the question by saying something like, "Well, you wouldn't know him." But chances are if there were somebody at Harvard setting up 10 servers in a data center, I would have known them, and I think he was referring to himself or to Dustin. I could be wrong, though.

- Q. When you say "He would often claim to be working very hard on something and then not turn it in, " can you elaborate on that.
- A. Mark's role during the course was to work on what are known as "Fast Fourier Transforms." They were an integral part of the product that we were trying to create, and at some point our professor decided that Mark was absent from class so often that he was going to reassign Mark's job to somebody else.

Mark sent me an instant message, since it was my job to manage all the programmers, in which he was extremely upset about this and there really was not much I could do because the professor had already made the reassignment.

- Q. Are you aware of any other examples where Zuckerberg claimed to be working hard on something and then you learned that he had not been?
 - Well --Α.

MR. COOPER: Objection to form. BY MR. WALLERSTEIN:

- Q. Go ahead.
- I'm aware of other people who make allegations against him, but I don't know anything about the validity of those allegations.
- Okay. To what do you attribute Facebook's Q. success?
- A. Well, that's a very vague question. I think there are several factors. It would take a long time to list them all, but I think what's important to me is that my contribution did affect what he created.
- Q. But your contribution was then later actualized in the houseSYSTEM; right?

MR. COOPER: Objection to form. THE WITNESS: My contribution was houseSYSTEM and it came before Facebook so I would not say "later." I guess I'm not sure I understand. BY MR. WALLERSTEIN:

Q. Well, how important do you think it was that Facebook launched before your site became functional with FaceNet?

MR. COOPER: Objection to form.

THE WITNESS: Important to what or to

whom?

BY MR. WALLERSTEIN:

To the success of Facebook. Q.

Let me try it again.

How important do you believe it was to the success of Facebook that it launched before houseSYSTEM became functional with FaceNet?

MR. COOPER: Objection to form.

THE WITNESS: I don't think it was

important at all.

BY MR. WALLERSTEIN:

Q. Can you give me maybe the top three reasons you think that Facebook has more users as of January 2005 than houseSYSTEM?

MR. COOPER: Objection to form.

THE WITNESS: Well, I can give you at least three. One of them is that the social networking nature of the site lends itself to exponential growth. A second is that Facebook was the beneficiary of an inordinate amount of press coverage which was typically glowing in its favor. A third is the fact that it had a \$12 million investment by 2005 which allowed for significant expansion.

BY MR. WALLERSTEIN:

Q. The first factor you mentioned, the exponential growth proclivities of social networking, that applied -- that feature would apply to FaceNet as well; right?

MR. COOPER: Objection to form.

THE WITNESS: It would theoretically.

BY MR. WALLERSTEIN:

And so why not actually? MR. COOPER: Again, objection to form. THE WITNESS: Because of the second factor, I think I listed, which was the press. There were wide disparities in the press coverage for houseSYSTEM and for Facebook. BY MR. WALLERSTEIN:

- Q. And among the press you're referring to is The Crimson?
 - A. Primarily.
- And do you have theories as to why The Crimson gave more favorable coverage to Facebook than to the FaceNet feature of houseSYSTEM?

MR. COOPER: Objection to form. THE WITNESS: I do have theories.

MR. WALLERSTEIN: Okay. That's all I

have.

MR. COOPER: I just want to clarify two small things.

/ / / / / /

FURTHER EXAMINATION

BY MR. COOPER:

- Q. You said you did have a revenue model at the same point for FaceNet?
 - A. We sold advertising.
- I believe during the demonstration there were actually some banners or some sort of advertisement on the bottom of the --
 - A. Yes, that's correct.
- And was that the type of banner that was available when FaceNet actually went to the revenue model?

- A. Yes.
- Q. I guess all -- I just want to make sure. What we were seeing was part of the archival of FaceNet and was not actually an overlap by any current web information --
 - A. No.
 - Q. -- concerning advertising?
- A. Those were the images on display at the time.
- Q. Okay. And then you indicated that Mark Zuckerberg is suing you?
 - A. No, I did not.
- $\ensuremath{\text{Q.}}$ Okay. I misunderstood. All right. Then strike that.

 $$\operatorname{MR.}$ SHAFROTH: Well, I mean, if we just want to clarify that part of the record.

EXAMINATION

BY MR. SHAFROTH:

- Q. When you referred to litigation that you were involved in against Mark Zuckerberg, were you in fact just referring to this case which was brought by ConnectU and to your participation in this deposition?
- A. Yes. My understanding was that this is litigation that I am now involved as I am sitting here.

MR. SHAFROTH: That's all.

THE VIDEOGRAPHER: This is the end of videotape No. 4, Volume I, in the deposition of Aaron Greenspan.

The original videotapes will be retained by LiveNote World Service.

Going off the record. The time is 5:09. (Off the record.)

MR. COOPER: By agreement before the deposition began we were recording, we hope, the demonstration that was given by Mr. Greenspan of the houseSYSTEM. During this deposition it was my understanding our IT group is trying to burn a CD which will be made Exhibit 30, and, to the best of my knowledge, it should be a true and accurate representation of the demonstration by video, with the understanding that somebody unplugged the computer before it may have completed.

With that understanding, if you have to leave now, I'll get it to you separately. I'm going to check before you even leave if it's available.

Is that fair?

MR. WALLERSTEIN: That's fine. (Whereupon, Greenspan Exhibit 30 was marked for identification off the record.) (Whereupon, at 5:11 p.m. the deposition concluded.)

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DECLARATION

I hereby declare under penalty of perjury that the

foregoing is my deposition under oath; that these are the questions asked of me and my answers thereto; and that I have read my deposition and have made the corrections, additions, or changes to my answers that I deem necessary.

In witness whereof, I hereby subscribe my name this day of , 2007.

AARON GREENSPAN

CERTIFICATE OF REPORTER

I, JANIS L. JENNINGS, a Certified Shorthand Reporter of the State of California, do hereby certify:

That the foregoing proceedings were taken before me at the time and place herein set forth; that any witnesses in the foregoing proceedings, prior to testifying, were placed under oath; that a verbatim record of the proceedings was made by me using machine shorthand which was thereafter transcribed under my direction; further, that the foregoing is an accurate transcription thereof.

I further certify that I am neither financially interested in the action nor a relative or employee of any attorney of any of the parties.

IN WITNESS WHEREOF, I have this date subscribed my name.

Dated:

JANIS JENNINGS CSR NO. 3942