Olivia Ryan: Okay, it's June 27, 2006, and we're here with Blake Ross. Blake, do you remember—or can you tell us when you first started using computers?

Blake Ross: Yeah, I think I first started really doing serious work on computers when I was eight years old.

Olivia Ryan: And do you remember the first programming project that you worked on?

Blake Ross: Yeah, it was really just my own personal web site.

Olivia Ryan: And when did you begin contributing to open-source projects?

Blake Ross: I stumbled across the Mozilla project in 2000. I was looking for the next version of Netscape and came across the open-source project and thought it was a really cool way to, you know, get involved with a really large project. Anyone can get involved, and so I started off by just filing bugs and talking to other contributors and just started kind of fixing my own bugs at that point.

Olivia Ryan: And tell us how you then began working for Mozilla?

Blake Ross: Okay. So because Mozilla and Netscape worked very closely at that point, because Netscape is based on Mozilla, I knew the Netscape team very well and I started kind of helping them fix their own bug list for the forthcoming release of Netscape which was Netscape 6 at that point. And they offered me an internship for the summer. I think it was—I forget which summer it was. It was one of the summers during high school.

Olivia Ryan: Like, 2000, 2001?

Blake Ross: Probably 2001, I think, because I got involved in 2000. And yeah, so they just invited me out to Mountain View for an internship.

Olivia Ryan: And then that ultimately led to a full-time job?

Blake Ross: It was never really full time because I guess high school was my full-time job at that point, which is not a very good job. But I did a couple internships with Netscape and then started contracting with them from home as well.

Olivia Ryan: And when you worked with Mozilla, did you generally sort of work alone or within groups? And when you worked in groups, how was it determined who would do what? How was the division of labor sort of determined?

Blake Ross: So in the original Mozilla project it was one very large group basically divided into module owners. So you'd have a module owner for bookmarks and one for

history and all that kind of stuff. And—do you want me to talk about Firefox basically at this point or—?

Olivia Ryan: Yeah, sure.

Blake Ross: Okay. So with Firefox the model was a little bit different. It was a much smaller team working on a fork of the code base. It was small intentionally because we saw a lot of problems with that large group model, and so, you know, it was a handful of people. And so at that level there's not really strict module owner division. It was basically just the Firefox team, and we all kind of had authority over the entire Firefox user interface.

Olivia Ryan: So early on in the development of Firefox I understand the UI development was restricted to sort of a small team of people.

Blake Ross: Yeah.

Olivia Ryan: So why was that done and how did or did that access sort of change over time?

Blake Ross: That was done because we found pretty quickly as most of the projects have that UI designed by committee just does not work very well. So it was especially bad in the old Mozilla world because you had UI designed by committee and there were two different committees. There was the Netscape committee with their own set of motivations, especially, you know, having to make money off the Netscape browser, and there was the Mozilla community or committee which, you know, is not really interested in turning a profit. And so you had all these different factors and motivations weighing in on the process. And it was a real mess. So with Firefox we said, We're going to fork the code base, give control to a very small group of people who we think really have the end user's best interest at heart and see what they do.

Olivia Ryan: And so was it difficult sometimes to strike that balance between working on an open project and trying to keep end-users in mind?

Blake Ross: Yes. Yes. Everybody hated us for a long time. They still might. But yeah, I mean, one of the major problems was that in an open-source community run by programmers, everything is really based on numbers and logic and facts. Right? That's just the world that developers live in. And so in the old world if a bug had for example 700 votes, that was considered a lot and the bug should be fixed because the community wanted fixed, and the community controls the project. And with Firefox because we were targeting a much broader mainstream audience who wasn't going to voice their opinion to us in the bug-tracking database, we had to go by basically intuition a lot. So we would often resolve bugs as won't-fix. Essentially, we're not going to fix this bug because we don't think it's a good fit for Mom and Dad or implement this feature because we don't think it's a good fit

for Mom and Dad. And the only statistics or the only basis for those kind of decisions was our own kind of intuition, and that does not go over well in a community that's used to really just having strength in their own numbers.

Olivia Ryan: Mm-hmm. How do you generally communicate with people or how did you when you worked at Mozilla, with those who you worked with. What methods did you use to communicate with people?

Blake Ross: So I think all of us were on IRC, like, 24 hours a day. So that was a big means of communication and especially with Firefox early on. You know, we've got—like most other open-source projects we have newsgroups. We have mailing lists. Email is very big. But I think IRC was actually the most important form of communication, especially because we had—obviously we had programmers from all different continents, so.

Operator: Mm-hmm. Did it ever, like, get confusing when sort of major decisions were made in IRC and if others kind of didn't catch that? Was that ever an issue?

Blake Ross: Yeah. I mean, it certainly was especially with the Mozilla project. Again with Firefox because the team was so small, you know, everyone was pretty much there all the time and there wasn't a formal decision-making process. It was basically us just sitting around on IRC saying, you know, "Let's strip this feature. Let's redesign this this way." And that's kind of the benefit of a small team. I think that now that Mozilla's growing back to its older size again, now that Firefox has gotten as big as it has, there's certainly tension around, you know, how did that decision get made and why was it made and who made it and where's the documentation about that?

Olivia Ryan: Would you say that strict ownership of specific areas of the code are enforced?

Blake Ross: Are enforced?

Olivia Ryan: Is enforced. Yeah.

Blake Ross: [laughs] Yeah, I think they're pretty well enforced. I mean, it's very hard to answer these kinds of questions because the project has gone through so many different cycles and so many different stages. You know, sometimes it's been very well maintained. Other times it's like no one's been working on it and it just kind of goes back and forth. I think these days now that Mozilla has grown as large as it has and really has the resources, there's definitely a much better division of labor and it’s much better authority.

Olivia Ryan: Have you ever clashed with another developer over a particular point of code?

Blake Ross: Oh, no. We all get along.

Olivia Ryan: That's sort-of obvious but, like, how do you—I guess what I'm getting at is how do you resolve those differences?

Blake Ross: How do you resolve that? So, in the old Mozilla world, and I hate to keep using that phrase but I basically just mean the original Mozilla application, part of the problem was that those kinds of conflicts would usually be resolved in user interface. So two developers couldn't agree on something. Let's just add a preference or let's just add a menu item and let the user decide whether or not to use that feature. And that's a pretty obviously poor way to design a user interface because it just gets cluttered with everyone's, you know, unmade decisions. So with Firefox we knew that at the very least we wanted to make decisions one way or the other. They may be wrong, but we have to really keep the user interface simple. We actually tended to get along pretty well, the five or six of us who were making decisions about the product in the first six months or so. Now that it's larger you can go in the newsgroups, you can see very long UI debates happening about various features. Ultimately it's just about reaching consensus and, you know, everyone has to compromise a little bit. But there's always going to be disagreement in an open-source project, I think we did pretty well.

Olivia Ryan: And have you noticed sort of—or do you think that there are sort of like natural tensions between those who work on the front end and those who work on the back end?

Blake Ross: Yes. That's a great question. Yeah, there is because—well, I'm going to think about how to answer that one.

Olivia Ryan: Or I guess maybe another way is, like, how much communication and coordination is there between those two groups?

Blake Ross: Yeah, I mean, there's a couple problems. So one is that in general, and this is obviously not true for everyone, but in general the people working on the core layout engine and the back end in general are not as interested in making a huge mainstream product as the people working on the front end, right? Because the people working on the front end are all about creating things that face the user everyday and they're very excited about interacting with regular users. Whereas people working on the back end tend to be more interested in enforcing web standards and creating solid, very performant code, which is obviously critical to the product. But there's often clashes as far as, you know, are we spending too much of our time on marketing and on all of this stuff that is not important to the core technology? I think the flipside of that is that a lot of the back end engineers understand that because of the work of the front end engineers and all the marketing that's going on, that back end work is being widely distributed to a much wider audience, right? So do you want to create a layout engine that's being

used by a million people or being used by 60 million people? And so I think at the end of the day that's kind of how we resolved that tension.

Olivia Ryan: Okay. To what extent has Mozilla relied on the work of volunteers and, like, maybe how has that—or has it changed over time?

Blake Ross: It's always relied on volunteers. I mean, I started as a volunteer. I think most of the people working on the project in any kind of official capacity began as volunteers. I guess it's changed over time in the sense that now Mozilla finally has the resources to be its own independent entity and so it can really hire a lot of these volunteers and actually pay them, which is obviously a great thing for the community. But we still have, you know, hundreds of thousands of volunteers, so it's a very strong community.

Ken Albers: Why did you sort of—what led you to volunteer?

Blake Ross: What led me to volunteer? At that point I had been working on websites and programs that were used by, like, four people including me. And so this was a chance to work on something that even at that point was being used by over 2 million people and that was really cool.

Olivia Ryan: Did you at the time think it might lead to, you know, like, a full-time job or something or were you just—?

Blake Ross: No, I wasn't thinking about it. When you're 14 you're not thinking, "Wow, this could be a career." You're thinking, "This is a cool, you know, afterschool kind of thing." So.

Olivia Ryan: Do you think that's sort of most people's motivation or what other reasons do you think people volunteer?

Blake Ross: No, I think that is actually the reason why most people contribute just because they use the product themselves, they want to see it succeed. Some people want to see open source in general succeed, but I think very few people are a part of this project just because of their own career aspirations.

Olivia Ryan: So why do you think that Firefox has been able to attract such a large number of users?

Blake Ross: I think number one it's because we decided very early on that that was going to be our audience. So just that decision alone really impacted the way that we designed the product, and we made a number of very deliberate decisions that we were going to design something very simple, very easy to use even though it wasn't quite the right product for the community we had at that point. I think the second reason is because of efforts like Spread Firefox and just the fact that we

really did the legwork from the very beginning of the project go out there and really try to attract mainstream users, which was kind of rare for an open-source project to do that. So I think it's just because we were the right product at the right time. Internet Explorer had been abandoned, and we went out there and just converted people one by one.

Olivia Ryan: You were pretty instrumental in Spread Firefox from the beginning, right?

Blake Ross: Yeah.

Olivia Ryan: Was there sort of a debate, like, "How are we going to spread this word? Should we hire full-time, like, marketing people?" And, like, basically just how did Spread Firefox come about and what was, like, the long-term vision of what Spread Firefox—?

Blake Ross: Right. Right. Well, I mean, yeah, you say I was instrumental. I was instrumental in putting together the site and helping put together some of the campaigns, but obviously it's the volunteers at Spread Firefox who are really the ones making all these downloads happen. And we've got about 200,000 volunteers today, and our general strategy is that from time to time we do very organized campaigns like the *New York Times* ad campaign or the Firefox Flicks campaign you're going to see—or that you can see right now. And the intent there obviously is to kind of find strength in numbers. And then the other kind of campaigns we try to run are very individualized campaigns. So can we find four people in Texas with a similar skill set that are nearby each other and have them go out and spread the word in their own way? So just how can we leverage the unique talents and resources of each individual contributor?

Olivia Ryan: Mm-hmm. I know you're no longer working for Mozilla right now, but how would you list Mozilla's priorities at the time that you were there?

Blake Ross: I think the organization's priorities really haven't changed much since the beginning, since they were first kind of born inside of Netscape, and that is to foster innovation and choice on the web. Really to provide an alternative to the proprietary stuff that Microsoft puts out. I think that the priorities of the Firefox project went a little bit beyond that and we really wanted to not only foster choice and innovation but really try to attract a very large mainstream audience. And not just kind of throw the product out there and let it be there but really actively go after that audience. And so I think that that was my personal priority at least and the priority of a lot of people on the team.

Olivia Ryan: So if I could just go back one second back to marketing. Well, no, I guess we probably covered that. Sorry. Have you contributed to any other open-source projects?

Blake Ross: No. Thankfully. [laughs]

Olivia Ryan: [laughs] And how about any sort of more commercial software projects?

Blake Ross: No. I mean, Mozilla and Firefox are really the only large software projects I've worked on. I worked on a software project at Stanford, a security project. But it's pretty much been Mozilla full time for a while, except for this new venture that I'm working at right now.

Olivia Ryan: Is it—is that also—?

Blake Ross: So that has to be more commercial just because we don't have the benefit of a $2 million grant from AOL that Mozilla had, or donations. So yeah, that will be a little bit more traditional. It will probably be BC-backed, but we do hope to open-source that as well.

Olivia Ryan: Mm-hmm. Can you discuss what it is you're working on?

Blake Ross: No. [laughs]

Olivia Ryan: Okay.

Ken Albers: Well, have you found the process at all different, though [inaudible]?

Blake Ross: Oh, yeah. It's totally different. It's totally different. I mean, people think, "Oh, you know, you already helped the Firefox so another startup should be just, you know, going through the same old steps again." And it's entirely different. Just, you know, you have to put together a pitch. You have to go out. You have to raise money. You have to make money obviously, which obviously Firefox is doing now but that wasn't one of the original intents behind it. So it's a very different process.

Ken Albers: And have you found that you had to actually structure the way you're working at all differently or—because you sort of had that—you know, a lot of what you sort of talked about is that—or the feeling I've gotten is that with Firefox there was pretty strong leadership in the beginning. It was a small team, and it sort of was leadership in the sense that everybody was sharing it. It wasn't—you know, it didn't need a lot of direction. But are you finding that doing your own thing now that you actually have to build these—?

Blake Ross: Yeah. It's much more challenging. I mean, one of the things that bothers me actually is when I see the press say that, you know, the Firefox team is five or six people. Because you have to understand that the Firefox team is built on top of the Mozilla team which is many, many, many, many people. And when you go off on your own and try to do your own project, and on this project I have only

one other partner, you really start to realize just how valuable all those other contributions really are and all that support you had working on Mozilla. You know, there's just two of us right now, so.

Olivia Ryan: Is it difficult generally do you think for kind of a commercial project to go open source?

Blake Ross: Yeah, I think it is because—well, there's two reasons. Number one is that a lot of investors are kind of afraid of the concept of open source. They don't really quite get it yet. Number two is that a community is going to be much more distrustful of a project that seems to have commercial motivations behind it. So we kind of saw a little bit of that when Mozilla announced that it was turning a large profit from Firefox. But people fortunately understand that all that goes right back into the project.

Olivia Ryan: Do you think that some of the things that might make companies hesitate might change now that Firefox is so visible and it's sort of a success—example of success. Excuse me. Or I guess to put it another way, like, what do you think Firefox might do for the open-source community as a whole or for software as a whole?

Blake Ross: I hope that it demonstrates that an open-source project can actually do marketing and can actually reach the mainstream. I think that Firefox is probably the first real open-source product that might actually be on Mom's desktop for example. And unfortunately I don't know, I don’t know how it's going to impact other open-source projects, because it seems to me , it seems to me that the problem with many open-source projects hasn't been a fear of marketing, it's actually been kind of a disgust for marketing and a disgust for mainstream users. So if you look at other open-source cultures, you actually see developers ridiculing mainstream people because they're, you know, they're not techies and they just don't understand that culture. And so I think it's going to really require a cultural shift at other open-source projects for them to tackle the mainstream like we have.

Ken Albers: I mean, even coming back to, you know, there's been a lot of tension or it seems part of the community sees—thinks that something fundamentally changed with Mozilla creating a corporation, you know. And there were people like Chase Phillips who said it sort of became opaque and—

Blake Ross: Did you talk to him?

Ken Albers: Not yet. You know the—you know, you didn't really understand where things were going. I mean, what are your feelings on that sort of, you know, on that tension there that people see between nonprofit and the corporation and money coming in? You know, do you think that Mozilla sort of changed in that process for good or bad?

Blake Ross: I think that they changed in the process. I don't think that they changed in terms of their structure. It's still wrapped—it's still owned by a nonprofit organization, so all the money coming in is still going right back into the project. And that's—you know, people are always going to have their own conspiracy theories, but that's just fact. It's wrapped in a nonprofit organization. Obviously the company has changed now that it has tens of millions of dollars and it's not relying on donations anymore. In some ways it's changed for the better in that it now has more resources and a bitter division of labor like I said earlier, and I think in some ways it's changed for the worse in the sense that now you have a lot of design by committee again, which was one of the reasons why we split off Firefox in the first place. So, I mean, to be honest one of the reasons that I'm not really actively involved in Firefox anymore is because it's gotten so large. It's gotten more mature, but it's also gotten really much slower and it can't really innovate as fast and as quickly as it used to.

Olivia Ryan: Do you consider open-source software projects a public service?

Blake Ross: No. I mean, I really just consider open source another kind of development model. I think it has a lot of strengths and a lot of weaknesses which we talked about. I'm not very religious about open source like some other people are. I think that it has its place, but I don't think that it's, you know—.

Olivia Ryan: Well, how would you define—just this is, like, a really broad question but how would you define a successful open-source project? What sort of practices and elements do you think are absolutely necessary for a product to succeed?

Blake Ross: I think that the most important factor is that the developers really understand and be in constant communication with their users. So I'm not saying that the user has to be Mom or Dad or this kind of mainstream audience that we're targeting. It's fine for example, Apache to be targeting developers. But whoever the audience is, you really have to understand their needs. And in some open-source projects that I've seen, the developers tend to kind of shut themselves away in their room or in their office or whatever and just kind of code 24 hours a day, and it's impossible to design a product for someone if you don't empathize with them.

Ken Albers: So essentially you would say also that consequently, like, a successful project is one that people use, you know, that—

Blake Ross: Yeah. I would say a successful project is one that people use. Absolutely. It doesn't have to be at the scope of Firefox, but whatever audience you're targeting, a large percentage of them should be using it if you're to be successful I think.

Olivia Ryan: So another broad question.

Blake Ross: Sure.

Olivia Ryan: What you think the future of open source is?

Blake Ross: I think that open source is on the way to becoming a lot more professional. Obviously it has its roots in a group of hackers kind of separating off from the mainstream, doing their own thing, and I think that because of Firefox some companies are going to look at this model and say, "Wow, this really works." That could be good for open source, but it could also be bad because it might lead companies to just use open source as kind of a marketing tactic. So I think that Microsoft kind of does that in a way with their whole shared-source initiative. They're trying to say, "Look, we're open. We have the whole community spirit as well." But it doesn't smell like much more than just a marketing pitch. So I think that open source will get more organized and more professional. You're going to see more projects that are backed by real companies and not just by a group of hackers. And again I don't know if that's a good thing or a bad thing.

Ken Albers: And how much interest is there in creating sort of an alternative business model through open source?

Blake Ross: How much interest among, like—?

Ken Albers: I mean, just you personally, you know. I mean, is that something you think about consciously or is it more from a—are you coming at it more from, you know, the technical—.

Blake Ross: Yeah. I don't really look at the open-source model in terms of a business. I look at it really just in terms of a way to interact with a great community. And especially if you're a—you know, if you're starting a company, it's a great way to find new talent, right? Because you don't have to have a two-hour job interview with a white board and some silly questions. You actually get to see how the candidate would behave and would perform if they were actually a part of your team. And so I think that's why Mozilla's been able to attract some great talent.

Olivia Ryan: Do you see examples of open-source techniques being used in other areas of production today? Or do you think, like, the software movement's kind of unto itself?

Blake Ross: Well, I think we adapted it to marketing pretty nicely in terms of Spread Firefox. I mean, that really was the intent. We looked at other open-source projects and realized that they all kind of had this community of people who were not developers, not really testers either, but they still liked the product enough to sit around on message boards and talk about it all day. And it seemed like kind of a crime to us to waste, you know, the talents of hundreds of thousands of people who like your product and have a lot of free time. So Spread Firefox is really

about trying to extend the idea of open source to include everybody. You know, maybe you're a lawyer, maybe you're a teacher, maybe you're a florist. Whoever you are, you know some people, you have some set of skills and talents and there's got to be a way to put that to good use and involve you in the project.