Case C
Participant: Designer 5 (P)
Facilitator: Xiao Zhang (R)
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R: #00:00:08-0# ok, I gave a definition of designers' personal life experiences in this document, but I don't know if it is clear or can make sense to you.

P: #00:00:17-9# yep, I think so.

R: #00:00:20-0# ok, thank you. Let's start with some simple questions about your background.

P: #00:00:25-6# Right.

R: #00:00:35-1# ok. what's your education background?

P: #00:00:39-0# so I studied computer science and psychology. so I'm a bachelor and master in computer science. I think minor it's like, so that wasn't the HCI degree at the time when I was graduating, so the only way I could get that kind of human interaction piece was like take some courses and kind of minor and it was like that way.

R: #00:01:04-0# ok, so how long have you been as an interaction designer?

P: #00:01:08-7# I graduated in 2004, so 8 years.

R: #00:01:18-3# how long have you been working in [the name of the company]?

P: #00:01:22-1# I've been here 4 years.

R: #00:01:26-0# did you work in other companies before?

P: #00:01:29-9# yes, I worked at the company called red-aid before.

R: #00:01:33-8# So is it a local company or an international company?

P: #00:01:36-8# International company. I was based in Boston area. Red-aid makes Linux product and server operating system that runs a lot of websites and stuff like that. I started with them right out of school. I knew some people who worked there, and I worked with them on previous projects, it's an open source project called guano, it's like a free desktop thing, I have been working on that at school for a while as part of my course work and extra work, so I knew people through that at red-aid kind of started there as an interaction designer through their desktop project.

R: #00:02:27-5# ok, can you briefly introduce [the name of the company] and the Vancouver office?

P: #00:02:34-4# so [the name of the company] is a complicated in terms of like a corporate structure, interesting if you understand it and this is maybe too much

information but it's a common problem where companies that are for profit especially they go public and things like that, share holders get to decide like company direction based on board directors and often that is deemed like kind of chasing your money I guess you can say, like companies who start with values that were certain things, there was a company called method that makes soap products and stuff like that, right now they might sink, they are based in California and they started with this kind of idea that they could build products that were environmentally friendly during the process and for people, and these are like cleaning products and once they went public, in order to like become bigger and kind of build out, they had this battle of share holders wanna to maximize profit which often then cutting corners according to their values, so [the name of the company] is actually structured, it's been around before method, what they did they structured a foundation, which is a non-profit entity, which is a sole heir share holder of the [the name of the company] corporation, which is for profit actually, that way like our for profit interest are only deemed like and only defined by this non-profit entity, so it's an interesting way to kind of (like of) raw around the fact that we have a mission of just like improving the web for every person and it doesn't has nothing to do with us anymore, money has everything to do with us being for the benefit of the people, but we are able to act like a for profit company because non-profit is really restricted in a way that they can paying their employees and offer benefits and things like that, so I work for the [the name of the company] corporation and they have office in Toronto, I am here in Vancouver, and some other offices are around the world. It's about 600 people now. This Vancouver office is 20 people. And our major product is [the name of the browser]. And everybody knows and also we make a mail client called thunderbird they have a number of kind of side projects. and [the name of the company] Foundation actually does a number of other projects on their own that are just periodically kind of nonprofit based, like things what they do like design jams, trying get people to understand how the web works or create videos using open web, technologies things like that and just promote like open web stuff, so that's the general [the name of the company] Cooperation. Most people are working on [the name of the browser] or some kinds of companion to [the name of the browser] in some way. myself and the team that I live, we work on a new initiative product called Web Axe, which is kind of like on the iPhone or android, they have like apps in app store and things like that, we are trying to build an equivalent that just uses the web technology, so you know like Gmail, you can consider as a web app, you know, doesn't use a lot the back button or anything like that, you always just kind of navigating within it and that is really kind of sophisticated web page if you think of that way. So we are trying to build that for phones and other devices such that people don't have to like develop just for the iPhone or just for the Android that works across things the same way the web does like on the Mac or Windows, Gmail is the same because web browsers do that.

R: #00:06:14-3# Ok, it makes sense. So what's your job position here?

P: #00:06:19-5# So I am the head of like all services, design. Services are like apps, and identity and anything that's not [the name of the browser] essentially like I head up to design for everything that's in the cloud, like that sort of stuff.

R: #00:06:34-1# I have seen some of your information on the website called LinkedIn, so the title of your job is principle designer?

P: #00:06:46-3# yep.

R: #00:06:47-4# Principle interaction designer of this office?

P: #00:06:53-4# Right. But everyone in this office works on different projects here. Everybody like all the designers report to me or somewhere else, so, there is one designer who actually is a part time contractor.

R: #00:07:13-0# ok. so what is the routine of your job?

P: #00:07:17-1# so a lot of it is couple of different projects that I work for, there is one app and identity, a lot of is reporting to them and delivering kind of different designs, we use what I consider like our kinda standard [the name of the company] design process, and just working with them on that. So they often have several usually because it's like engineering-driven, which like most tech companies kinda are. There is a project, or a product, there's already kind of being started in some fashion like someone has experimented with something and they want to build that out into something that's really usable, and a product for, design for more people, and so that's one we tend to come in, so the day-to-day kinda routine as working on design documents, working with the developers, they are like understand requirements, and things like that, working with the user research team in order to prototype out of the field then test them, and then yes, I guess just continuing to do the design process like working with the metrics team in order to gather data on the designs that are being implemented so that we can have an understanding about how things are being used after that.

R: #00:08:44-4# so what's your main responsibilities of your job?

P: #00:08:58-6# I guess I will explicit because I am doing a lot of management right now, but like for projects, main responsibility is interaction flows, prototyping things, and HTML for the apps, specifically working on like a app market place, app store kind of thing, and so we're working at the flow for purchasing right now, we're working with the development team in responsible for that in lots of. that's a lot of , we are using like PayPal for the purchasing to handle all the processing of the money, and so we have to figure out how PayPal interacts with our site when you click buy, where PayPal shows up, how people understand that, like where they get, like who they are purchasing from, and then how they get the app in the end, so we are doing an interaction flows for them and then working with them, and they are using something called Bugzilla for a test management, so usually we work through requirements for them on like the purchasing flow once we understand that, and have a kind of definition for what has to happen, for technology and what they can do, then we created kinda wireframes, build those out and give these to developers so that we can talk about the wireframes if they are right according to like what is possible the technology behind it, and then from there we tend to create kinda prototypes, HTML prototypes, something that we can try out in the field, user research takes out to the field. Right now I work with a woman Dian who tends to like put this on her phone, ran outside and find somebody and do: Hey, can you just like type through real quick, I 'll give you like 20 bucks. And so that we get some feedback that's like you know, (quantitative or) qualitative analysis to get some understanding of does that make sense? So the average person will be like, Oh yeah, I would expect to do this, next I will expect this because a lot of designs is trying to understand expectations from the average person who don't understand what technology you are shaving, and so then we get that back, we maybe alter the designs, go back to the developers like to get their feedback on the changes and help them understand why we made the changes, often there is like a conflict because if you get feedback from users

that this doesn't make sense, you really have to kind of help the developers see exactly why, because often they will be like, oh, no, it just makes sense in the way before, we don't want to make these changes. So you really have to engage them on that kinda case. And then for this purchasing thing, now we are at the stage where we have done most of that work, and they are kinda implementing things, and we are going back and forth to ensure that certain pieces are working because there is lots of stuff that comes up (off) that you know, couldn't be expected.

R: #00:11:58-0# Ok, so I am confused that you are working for the app, but you also talked about the purchasing process, so that means when I downloaded the app from app store. So you both responsible for designing the app and the purchasing process?

P: #00:12:26-8# So we have some example apps that kinda made just to as like fake things that don't really do anything. We are responsible for designing the whole app piece. For developers, what else are able to deliver in order to make an app. What are the technologies and stuff like that, but for this example, it's just the purchasing flow. Yeah, that's what I have been working on for the past couple weeks right now, it's like a one specific flow of the market place when you click purchase, because you know apple does their own purchasing in the app store, they handle the money, they already have your credit card, it's really a nice system for them because they are allow to do all the purchasing and it simplifies everything a lot of ways although their job is way difficult, because handling money is a difficult problem, but for us, we wanna to have different identities like allow you to take the money, like you could come to our store with a PayPal identity or another pay servicing, like I am working with carriers, like carrier billing, this is popular in Europe to bill like, you know, Bill Oxygen, you know one of the carriers for cellphones instead of paying with your credit card, so we are trying to include that system. So when you registered in our store, you kind of set up whoever you are billing is, and then when you purchase something we just prompt you to say, ok, 99 cents is gonna go to the O2 network, would you like to say ok, so it's a little more complicated because we are providing choice.

R: #00:14:06-8# So that means you are designing a platform that like Amazon, but sell different apps?

P: #00:14:42-5# Yeah, we are building it very much like a store, the technology behind it is supposed to enable website be able to ask for money. Because the problem with the web is if you wanna take money from people in the way that's like the app store do, like most apps are like 99 cents, 1 dollar 99, that's not much money for most people to pay, and with the app store system, because you already have a credit card and everything is good to go, it's very easy for like small businesses to be able to offer an app and get a small amount of money from large number of people, which adds up above for a website to do your own billing is a really difficult process, the answer where website could, or any site could actually just ask you like, we just want 99 cents, and then you would already have a billing provider set up, and you are able to pay them, and do that and so on.

R: #00:15:34-8# So what's the name of your store?

P: #00:15:37-1# Ours is called the [the name of the company] market place right now. And it will be designed like a flight ship store so it's there to show what's possible and also show off the technology in the platform so that like other websites and web apps can take advantage of the site.

R: #00:15:59-2# Have you launched different version?

P: #00:16:03-8# We have kind of the alpha site that's running right now, but we have a beta version coming out in April where the payment process would actually work.

R: #00:16:16-5# And what do think about interaction design practice? What's the difference between what you have learned in school and what actually happen in design industry?

P: #00:16:42-6# Well, I guess, It's hard to apply what you learnt in school to what actually happens because for one, every company has a different system when you arrive it, like my last company, there is much different kinda interaction design because they moved all the developers to one space, and they want everyone to work from one office, which has a lot of benefits, because as interaction designers, we will do some basic kind of research stuff beforehand, present that to developers, and then from that we were always sitting with developers, and whatever they were doing, it wasn't so much like a hosted design as we are just looking at small pieces every time. We are just looking at, I'm designing this window, and this window, and then this window, but everything was trying to move so fast, that we never actually.. like in school, you will do like a design project where you kinda design the whole system, and in the end, you kinda present to other people, that's very much like a client design model. Like when you're doing design for a company that does like client service work, all the times what you do is you really work out this whole system, present all of your research, and the final day, you do sliders or whatever, you kinda like present to the people, it's a lot of work, it's a lot of like show work and it's a lot of times on details and kinda selling your design in a lot of this industry, like after school, it's not so much like that, there was no time to actually do all of that work, unless you do it all at home and even if you did, it wasn't interactive enough. If I could do school again, I would do more designing with the developers at the same time, and user research and product people, getting a team of people all to understand the process would have been much more valuable to what I do now, because now it's a lot of like, you do need to sell a product people on kinda the vision, most of the products are already started in some fashion, it's not like you actually are designing a lot of things from scratch, unless you know create your own product which you can do, all the times when you started fresh in the company, it's hard to being that position because you are usually a junior designer or some kind, so it's a lot of more kinda interactive working with other people's processes and trying to influence them would be key skills to understand and learn vs. feeling like you are in charge and really like working the whole design process yourself. But i mean they are both valuable (neither of both are viable), because in the end, you do need, at this point, I can start new projects if I want and if I have extra time, you know, designers report to me right now, and we can start putting people on that and do kinda holistic design about things that we think were interesting, but it's been a year since I graduated from school, so I have to learn a whole new set of things and felt when I first started, I didn't feel like I was ready for this kinda design, like I kept telling everyone to stop and slow down, and lets really think about everything what we are doing, but you know, in the business world, nobody is willing to stop or slow down.

R: #00:20:29-3# What's the role of interaction designers in [the name of the company]?

P: #00:20:33-8# So, we hire a lot of interaction designers in [the name of the company],

when [the name of the company] first kinda bought into the idea of having designers, because you know, it started as mostly tech people. They hire a lot of kind of interaction designers because that's really make sense i think to programmers, people to like develop wireframes and flows and things like that, because that's very much how programmers think, we are kinda light on visual design and other kinda pieces of design, we only just started with user research in the past of 2 years or so, all those things are really important, it's great that [the name of the company] is now recognizing these pieces. But interaction designers have been from the beginning of designers in [the name of the company], how things kinda get done, because it does fit in really well with how programmers were work, like having a flow so they can understand the different screens they have to build and things like that, requirements for what's being developed.

R: #00:21:45-0# Does [the name of the company] have a standard or process for each project?

P: #00:21:56-2# We try, we haven't have too much of an organization in terms of design at [the name of the company], maybe recently, in the recent six months, we really try to, we have reorganized all the designers, previously designers were hired into different groups, so like engineering manager would hire a designer, not necessarily that designer would just work in that project in that group. Recently, i reorganized everyone, so the designers only work for designers. My manager is Jinghua, and then I manage a number of designers and they are all work on different products now, and in the same way, we have mentoring system and we are able to like actually start to get cohesive design processes across [the name of the company]. I am really big on tools for designers, like I really like having templates, OmniGraffle or Photoshop, or whatever kinda design tools you use, I like to have templates that everyone can grab, like I want to build a design flow, I wanna have the right kinda style and like typography to use in order to keep a consistent form across that phase. And part of that as well is kinda the design process, like how we start interact with developers and that's something that the design process what I have learnt, is define research, like brainstorm, piece, that really needs to be adapted in the system because when the products already exist, like when I started on this apps project, they had already been going for 6 months, so that's like most of the products work, because developers had like seen a problem, they see the problem very much like technical things. Like Apple and Google are going to like, oh, this space of like technology, and that's we create some alternative that allows for choice and things like that, and so they developed something that like how answers that, but it doesn't answer a user problem at all, like people are fine buying apps on their iPhone like there is nothing in our store that actually leave it as a user problem as much as there was like a technical thing or I guess you could say, a mission directive, like [the name of the company] 's mission is to ensure that everyone has access to these apps, like new comers are able to like build apps of whatever kind they want, and there was no, like Apple, a lot of things you read about Apple discriminating in their app store against certain types of apps or like you know like things that are questionable, and then it's maybe great that they stop like there is some drunk driving app I remember reading about that like, it told you where there will be like check-points for like (fire flisser) checks or whatever, they remove them from their store because they didn't think it was like a good thing or a good app. You know, it's questionable, In general, I think it's a good thing, but like who gives them the authority to do that? Like the web allows for anybody to build a website and delivers that kinda thing and that's more what we are believing, (not we want people, we want a better thing,) not that we want people to avoid for that kinda....I wanna get like a better thing...something to talk about than that one because I

don't want drunk drivers on the road, but that's like, it's difficult to being that position of deciding what apps are available to people. I think I lost, what was the question?

R: #00:25:29-0# Design process.

P: #00:25:31-9# Process, right, so the standard design process that I use was what we start with, which is, I think most people had learnt in school, and now, we are trying to (adopt) adapt that to understand how to like, when the project is already been so much defined technically, how do you then, say ok, here is a kinda design process for technical side of things, but there is whole other side that is, how do you design something that people want, how do you build desires around this product, so that's also I never learnt from school and I still don't really know how to do very well, we are still trying to like I have done this in practice, jumped on to products that are already existed, and hadn't had designers, but in order for new people joined to understand and not get frustrated by how things work, you want to have a set system like a process already that says, ok, so what you need to do is gather, you know, requirements for developers, why they are doing this, kind of pull that out, and then have a brainstorming section about, like ok, so this is technology base and we are trying to solve these thing, where is the user gain, what's gonna make people really want to get here, and developers and product people like to think about that stuff, like they are totally cool with that, like often developers aren't as good as it, because they are like, I don't wanna do it because they wanna get away from Apple, right? and you are like, no, it's not really true. Like no one thinks that way. Sometimes, they have that thought in the back of their head, and they are like, man, I am locked in, like I just, you know, maybe when like iTunes like deletes all your mp3 from your iPod because it just like, it thought you didn't own them or like random things like that happen, and that's when people had those moments, but….

R: #00:27:22-9# So they want to develop a totally different thing than app store?

P: #00:27:29-2# Right.

R: #00:27:32-5# from the technical perspective.

P: #00:27:33-2# yeah, it's like they, especially in [the name of the company], it's always like they are trying, they work like fighting for freedom in a way that often people don't know that they are not free, right? And so you are like, so as designers, if you have to come in and be like, so now, ok, this is like you are providing freedom for people, but they don't know that they are you know like, in jail. Right now, then like it's very hard to sell like security and privacy are difficult things to sell once people are scared. So like you know, you can trying go on like a fear techtic, you can just quick market fear, and then make people want our product because of that, which is not you know, I think a responsible attitude, but that's how, it's an easy way to get people to buy into security, right? when you have like...

R: #00:28:15-2# So in this project, you explore both what users want and what's the appropriate design process for [the name of the company] in this specific context.

P: #00:28:32-1# Right.

R: #00:28:41-5# So this particular project began with technical problems, but you also did use research to learn what the users' desires of the product.

P: #00:29:10-2# Yeah, exactly, yeah, I have a conference I was at recently, I got to talk with a couple of young designers and that was the thing I was trying to tell them about it's like how in a lot of tech companies, this is the thing you have to like figure out how to work, and like they will be like, something they created that solves a technical thing but it's not a product yet until people actually want it. So like, that is the thing you have to get use to and figure out.

R: #00:29:39-7# So, in this project, do you think your personal life experiences are the one kind of potential factors that can help or influence you in the design process? influence your design decision, influence how you generate some design ideas?

P: #00:30:03-5# Yeah, like the example you are having there, the potato, that was really cool, I did research about it and I read more about it, yeah, I mean I am certain that every designer has something like this,kind of like why you got into design, something like that. For me, my grandfather, he was a tinker, he was a very innovative person like very small way, the handy man, and his workshop was build out all three components, he looked like everything as if it had 90 different purposes when they were done with, I think part of this is also coming from my grandfather's life, he was in WWII, and part of this all generation that reused everything, so like empty coffee cans, like the chcofo and nuts or maxiwar house cans, you know that you see that whole coffee like once it's empty, he didn't recycle those things, he build them into his work bench, like they would be holding nails and screws, everything like that, everything you saw it was something else, has some point.

R: #00:31:34-9# Appropriation.

P: #00:31:36-1# Yeah, exactly. He would just invent these things, he would have a need, he would have random bits of like materials that we would mostly consider trash, but he would never saw things that way, he would like adapt everything in order to build whatever he wanted in order to make his life a little bit better, and he was like a prototyper. So like my strongest design process step is prototyping because I inherited from my grandfather this way of seeing everything, like we can just reshape that, we can take these random things we have, we can put them together and maybe make something, and when I see the end result and it still not right, we can just keep trying new things with different purposes (procedures). I have some photos that aren't digital, I should scan them, something like that of his work bench, because it's really amazing when you see these coffee cans and other jars and stuff like that. And there are baby food jars, and these are also like techniques you see like DIY stuff now on websites, so like, they take like a baby food jar, and then you take the top of it and then nail it up below a cabinet, so that you have this top that was nailed to like the bottom with cabinet and then you like screwed in there, so here you can see the different size of screws and stuff like that, because you want glass jars to hold these things below, and then you can just unscrew, take out, and nail and screw back in. All very cool, and he would constantly re-shift the work bench in this way, as like these things didn't work right, if those things were in a way, and he would build a new shift somewhere else, and then like move everything around like nothing was ever finished. I was constantly learning from the way he was working on his work bench, and I spent a lot of time with my grandfather in the summers around this area and stuff, so I leant a lot of that.

R: #00:33:43-1# Prototyping is a very effective design technique for designers. So that is

what you have learned from that experience?

P: #00:34:07-6# Yeah.

R: #00:34:08-5# How did you apply this experience to your design projects?

P: #00:34:25-5# A project I worked on previously, I was the principle designer for the product and one of the few are like, we started like a design approach was called [the name of the product], it's turn into now like the [the name of the browser] share, it's essentially a button on your browser, you click and it opens up either Twitter or Facebook, whatever kinda social networking sites you use, you can share a link or email, something like that, so if you are on a page, and you want to send it somewhere, it was all designed around like speed, and to see if we can kinda increase the level of sharing that people do around like the stuff they are looking at, but just making it easier. So I think it was a year and a half ago, we started that project, it was just like a simple like what If we did this thing, like the iPhone does when you are like on a page, like a webpage or something like that, and you wanna like share it, give it kinda like a list of things you can share with like Twitter, Facebook, stuff, and then you go ahead and do that through like their interface, like what If we do the share things in a web browser, like what kinda infect would that have, so myself and another designer and one developer, we just kinda did a week of work and see if you can put together a couple of prototypes about how we could do it, and they are all totally different, once we talked about what the problem was, we went back to our own space, and we try to figure out how would I solve this, so that we can get kinda like brainstorming but really individual, and then bring all together, oh, that's the design ideas back and forth, and we build quick prototype from there that did something. There is a reason why I love the prototyping stage even more than the brainstorming stage because it bounces things off, like you didn't see things in brainstorming. Like all the sudden, I realize, oh, actually that's not that convenient, like it seemed it would be totally convenient to click here, and then do this, but that's not at all, so maybe we need to start fresh from there. So that's like go right back into brainstorm a few ideas around this direction and see if we can kinda move that and then we will prototype that really quick to learn more. So that project started out was complete prototypes around this idea, one button on the browser you click, you are ready to share, (if) you hit share, and the it's sent to whatever kinda email or Facebook or Twitter, whatever you want, you can hit those things, and it was really interesting because throughout each prototype, we try to test it and try to metric to figure out people were sharing, what's it in sharing with, and we were doing user testing throughout it using usertesting.com I think, and yeah, that one was probably the heaviest prototyping I have done in [the name of the company] in order to create a product from which, especially from the beginning, we just designed as it's not a technical thing, and it's actually that piece show how difficult it was to get developers really interested in it because they really want to solve a technical problem, but often they don't really, like if they see a problem like this, if I want to share the website, I just copy the link and then open up Facebook, and I will push it there, so what's the problem there, and then exactly, that's the problem, we are just optimizing this one little flow, so that one is also a very interesting process thing like, you see that like everybody has different interests in the work that they do, and as a designer working on, if you wanna design practice (process), you really (have to) understand that, and trying especially give people, either get them understand the problems that you see and to get them interested in that, or give them pieces of that problem that are also technical, so we had one of the developers working on, technical pieces like, how do you standardize this across all different sites and make

it anyone can participate, and that's an interesting problem to solve, but not that interesting to me as a designer of kinda like, I just want to like improve most people's lives, you know like 80% of the people who use the web, and then the rest 20% was like, nah, I will get to it if I can. So yeah, I guess that's the, for prototyping, we created like an add-on, we had a like website, we tried so many different versions of this to like, and also on the phone, we tried in there to see how we could do it there, we just, lots of different things. And we also started with like just general paper prototypes before we went to anything like technical, which, and it's also just helpful to be like this screen, and then this screen, does that make sense, and then you know, the only problem with those is it's annoying to create new paper prototypes that if you need a small change. So, but it's more difficult to create new technical prototypes like once developers have created something and they see some values in it, it's also very hard to get sometimes them to like, be like, oh, ok, let's just throw that away. That's just like a prototype we don't need it because once they see a technical problem that they can solve in there, often they are like, the light bulb goes off, and they are like, oh, I can really fix this, you know, but you have to get them to stop, like it's just a prototype, we are gonna like, they didn't work for various reasons, you know, we are trying a lot.

R: #00:40:11-2# So how did you propose this project? I mean how did you come up with the initial idea about making sharing earlier when people use [the name of the browser]?

P: #00:40:35-5# We are actually pretty lucky because we had a like break in our previous work, like our previous project work kinda finished which doesn't often happen, we are getting like, oh, the products like done, we just, we delivered it, and like, because we were doing kind of a prototype I guess for another team, and once we finished it, everyone like, oh, ok, and so our, my manager at the time have given the room like, you know, just like come up with some ideas for what you think would be interesting that we could do next in this space. you know, something like social, and yeah, I don't like starting from things that are like social is such a weird thing. And I always put quotes on the word "social" because I find it really weird to you know, do something in the social space. concept I think, But for the [the name of the product], specifically, it was about, I like, I love Pawgram, I don't know if you know Pawgram, he is like a startup mentor in the States, and one of the things that he preaches is about solving small problems, not really complicated problems, but like looking at somebody's life , and maybe like the things that they do every day, and just like taking the piece of that and say like, you know, we can collapse that if we were smart about this, and that person like you know, has one less thing to like worry about, and I like that approach because like especially if you, let's say, we take [the name of the browser], right? We have 500 million users of [the name of the browser] on like a average basis, like if they in sharing links, it takes each of them you know, let's say 10 seconds because we even measured this like right? like if you go to a url. Let's say you are looking at CNN.com, some random article about like elections, and you think this would be great if you know, my sister saw this, she really loved this. The first thing that a person does, yeah, has to think, ok, go to the url bar, then click in it, because of the way that the like that input, input space works for that, right? If you like click in once, things are fine because it selects the whole text of the url. If you happen to double click by accident, it like then unselects the whole text and now you are just like, the cursor is just sitting there. This is like a problem we just saw on like random user testing, right? We just kinda did some, once we had the idea, we just like, oh, let's see how people share things, and then like we saw that one person like click in the like the link area, and they just happen to double click by accident, and then they went up to like edit, copy, and right now, nothing is selected, so like, it's not copying

anything, like the computer is just like, I copy nothing, and it doesn't say anything, right? because that's not what computers are good. And then they opened up like Gmail, and then they went there like they clicked in the body, edit, paste, and nothing happened, and then the person is just sitting there like, I don't know what.....and then they like close Gmail, went back to the link, then they have to had this process of like double, triple clicking until like it selects all because it selects a word first, if it sees a word in the url, and then like try to select the whole thing. It's amazing when you are like, you are actually examining the process for how people who aren't even like, we try to get people who aren't computer savvy to really see the problem expended what happens there, right? So now like the idea was just like based off that, maybe there is something we can do in the browser that like does this, and it also kinda work into the share stuff because I was using Facebook or Gmail, Twitter, and like Android, the iPhone, all kind of do this because they have apps built in, you have to say like, like, ok, like I can like send this link to somebody else and I have used that a couple times on phone, and I was like, oh, that's really nice, like I tend to share on my phone a little bit more. But I am not on these many webpages as my phone you know, like, sometimes, like, I will go from Twitter to a webpage, I think it's interesting, and then I send it off somewhere else, but because you know it's a small device, and the browser isn't all that good, I just tend to do it less then I am on my computer a lot,. I did, like I tend to see more websites there, so yeah, it was like, I don't know if we can fit that in. And then yeah, it was about like trying to really like focusing on this space now, and say like, this is like a 10-15 second window of people's time to like see a link, understand it, they wanna share, and then like trying to complete the process. And yeah, if you take 500 million [the name of the browser] users, every year, are doing this 10 seconds process, you know, that adds up to you know like thousands of hours spent trying to share when like, their end goal is link share to a person, but like we have these odd set of tools that everyone is trying to use in order to accomplish that. Like if you just remove that, all the sudden like, you have created millions of man years, person years of work available now, right? So that's how like the program often describes a lot of things is like, you are taking just an average problem, it's not rocket science, because those ones are easier to solve in general, but sometimes they don't seem sexy, right? like the share one isn't, it was really hard to get the developers on board because they are like, this isn't very interesting, this is not, like who has a problem with this, right? And it's like wooo, lots of people do. And that's why if you can like spend it out to like thing of 500 million [the name of the browser] users, and especially once we got a little bit data of like one person just like messing up this process, and being like, that person took 25 seconds to even like get to the right page of like Gmail, and then they mess it up, so then now it's like a whole 2 minute share. So if we could take that among like the 10 people we tried, and like the average was, I think that was an average of a minute or a minute half or some like that for a share to complete. And then, a minute and a half to 500 million people, it's like, we can turn that down to like second, and that's a lot of time saved, and like, people would be pretty happy about that, and then also like later, you see people share more, once it's like really easy, like all the sudden, they like have that great experience, and then they would like, oh, cool, the next page they are on that they might have thought of sharing but they didn't really, they actually do, they are tend to like in that page, and like, oh, let's send this off because it's so fast, like that was fun.

R: #00:47:11-5# Did the initial idea of this project come from your personal life experience or from your observation of others?

P: #00:47:46-0# I guess It came out some of my own experiences with like sharing links

around and also like receiving things.

R: #00:47:58-3# You have said it's easier to use iPhone to share links than to use [the name of the browser] or safari.

P: #00:48:12-6# Yeah, exactly, yeah like another people mention similar things like you knew when....using my mom as an example because people often like use their mom as something, but like, my mom, if she get a link from somebody like the New York times, it's a great example, like my aunt, there was one time sent my mom a New York times article on something, and if you read an New York times article on page 3, and then you copy the link and then you send it to somebody else, they arrived at that article on page 3, often it is really confusing when you look at this, and it's like the conclusion of the article, it's like the last 3 paragraphs, and then if it's your first time arriving at this, you will have no idea what's going on, right? and like that. And I remembered when she talked to me about that, like that was a while back that she had mentioned that, and like I was thinking like, well yeah, it's I mean I guess, like I didn't know how to solve, well, I think you just gonna click on the title, or maybe go back pages or something like that. And like, oh, we had to work it out, and I was like, that was weird that like you know that kinda happens when like someone wanna to share it, and then like it just urls and coding, so much information these days, and like there is no way unless you understands the urls and how they work to actually be able to get it right every time. And that was something that when I was thinking about this, I was thinking about that as well, even like the process and that technology availables, really difficult, yeah, but yeah I think a lot of like experiences of my own in sharing and then other people receiving and trying to share, I observe every time.

R: #00:49:56-3# So two designers and one developer were involved in this project?

P: #00:50:06-5# Yeah, we started it out with the prototyping, because I found it's really important to keep everything really small group, you know, the initial pieces, because you want real consensus and understandings about what's happening, so you need this really tight feedback loop. And it experienced afterwards, once we get to that like decision, implementations stage of like whatever your design is, then you often need more help from different people, but at that point, you have a prototype that people can touch and feel.

R: #00:50:38-6# So what's the process of this project? I'd like to know more about the details.

P: #00:51:39-6# I think initially, once we had the kind of idea out about where we would go, the problem was I think the initial idea still wasn't totally clear, it was kinda like, well, you can do this in Android or the iPhone, and it works pretty well. Like can we do this on the phone? And so I wanted to do some of the research first to see if this is kind of a problem.

R: #00:52:16-9# So first it's research, research in order to define and clarify what's the design problem is.

P: #00:52:25-7# Right. Yeah. it's specially saying. This came a lot of my experiences, I never trust my experiences, it's not a good idea. Can I actually get something behind?

R: #00:52:37-5# How do you do the research?

P: #00:52:57-4# We did some informal surveys where we like started to asking people like to sending quick surveys around to be like you know, how often do you think you share those stuffs, those provided some kinda insight, but yeah, it was mostly, so the...we did a user test on just share, like so the study was you don't need anything except for your browser, go to a link, and then send it to someone who is like of interest to you and however you want. Like it was totally open-ended, and that...we ran a bunch of them because like I needed to see that there was some issue, and then we can like maybe moving on. And then we saw like this click issues, and things came up that we didn't realize before because at first, the idea yeah was just like you'll copy and paste a link into something that will have you know like Facebook right there for you or something like that, it was like, the initial idea was kinda vague based around like some other things that we didn't really understand that a lot of the problem was copying and pasting, like that in itself, is not an easy thing for people to do because it's like all of the focus stuff where you like you know, the focus and selection is here and then you have to like click on something else which, is a tricky phase because you are like, not good at mouse, or like you know other people sometimes have like kinda twitching and shaking or hit the mouse too many times, like those things are really problematic because focus is like a title of walk. And so that's where like those research show those pieces actually do exist and so then from there, yeah we did just some kind of paper prototypes and like a that were in order to say like, ok, so if the browser was here, and we' d like have a button here, the idea is you click this you know, next prototype like window pops out that has all of your services, click that and it opens a new tab. Alright, and they went like, ok, so that's one, but, then, we just went on other ones as well to see, before even like trying to implementing any of those, because some of them you know, like the paper prototype for that one. I remember that one because I was like, we opened a new tab like Facebook. And then we are like, wow, and that could take a while like, that's what people already doing right now, right? it's essentially opening a new tab like Facebook.com, so we alleviate the need type facebook, and maybe the copy and paste of the url, I was like, is there more we can do if we just you know like did something else besides opening up a tab to Facebook. So yeah, then we did like another prototype, where was like we had some pop out thing that had most of the Facebook bits who are interact with it already. And then uses share from there, we did another one where like we did like variations of like sidebar. You open that up where it's like Facebook is already sitting there. And some of them were just like, or maybe we have Facebook around the background tabs so that things open up fast, and those were hard to paper prototype. So from there, we just kinda like yeah we went through some of these drawings and then we created...we use OmniGraffle because it's one of tools [the name of the company] has like site license for. And so we use that to then like draw out like things that we can like kinda present. And then we show these around to random people instead of ourselves, right? so because and then you can just do like a full screen. Pretend that this is your browser, click here and then it does the slideshow where shows the next thing, and then you are like, ok, now I am like, this is gonna share something, like that url or this page or Facebook, what do you think? And people would be like, I wanna edit this. And you'll be like, ok, you know, their first reaction is not to share, they wanna then modify it, and so, that was interesting to learn, how to adjust that? Like we didn't implement anything we are just showing people almost like screenshots drawings of what is going to be. And then after that without them, we created an add-on that reflected to the stuffs we learnt from the paper and OmniGraffle prototypes. And then the add-on, we used an user-testing and we would then like, we are on the test where you

know the goal is not only install the add-on, but then share a link with something through that add-on, and so now, because now we gone this round of using [the name of the browser] add-on, we didn't only test our add-on install process, from like arrive at this page, and it describes the share, click install, get the add-on, like if that worked, then continue on to find a new page to share with somebody else, and yeah, and that one continued, and we tried variations from there on that prototype, once we hit that stage of like prototype development, we really just started to like do finer iterations of that, because it was working pretty well for us, and so yeah we kinda continue that in the path for a while until, sometime last year, it was said that this is gonna go in [the name of the browser], but everything is getting like reworked now. What we had was a really good prototype that we built up, a pretty good process around like understanding how people are sharing and everything else, but you know in the end like, what we were building wasn't actually something that was ready to be in [the name of the browser] as much as they was to like understand that this is a good thing, like what we done is actually worth doing.

R: #00:58:46-4# so for the user testing, most prototype used is paper prototype or the interactive prototype?

P: #00:58:57-0# Yeah, yeah, the paper we used mostly for ourselves, and then that was just a way to, instead of like talking about what it was gonna do, it was, and it's a skill that like even the developers can do, like they can draw a browser, and then the tab or something like that, like so, it was some way where you can just like, everyone could kinda show, this is what I think my like design is gonna do, there, like, and then we can discuss what might happen and what you know, positive and negative about that thing.

R: #00:59:25-5# So the paper prototypes helped you to develop ideas, and the interactive version for user testing.

P: #00:59:55-7# right, yeah, exactly, and we could have taken the paper prototype out into the field then, and try a dozen of field because that works too and I have done that before, I don't actually know why we didn't, except that I think none of us were really user research people, so like, I just kinda like, I feel better about showing people like an interactive slideshow than I do about paper prototypes because I find sometimes, it's hard to setup. You will be like get people to really understand this like, this is just a piece of paper, and like, you are gonna tell me like what you gonna think about it, and then I am gonna move to the next paper, you know, a lot of, I guess maybe for me, it's always difficult to get people in that mode where instead of like show them in my computer screen and be like, you know, now I just like kinda click what you think, you click in order to share, I feel much better about that because like they requires less imagination on the test subject.

R: #01:00:49-8# Ok, we have talked a lot about prototyping. So my question is why you say your understanding of prototyping, a effective design technique for designers, came from your experience with your grandfather, rather than from school? I believe in the university we have learned that prototyping is an effective technique.

P: #01:04:25-9# Ok, so I think you are saying why do I think now the prototyping is important for designers?

R: #01:04:37-9# Yeah, why it's important for designers, and why this understanding

came from your working experience with your grandfather?

P: #01:05:06-7# Yeah, I think it was, just that it was like never, like the prototype was never done. Like my grandfather, he uses lots of different pieces, like random things in order to kinda accomplish whatever goal he had, but then, let's say like that glass jar underneath the cabinet thing, I remember he, at some point, they got in the way of like is working, and so he stopped and he like you know created this new system in order to like move the cabinet over and have that same kinda thing, but you know like a much clear kinda organization on a different space. That kinda thing is what I think was the piece that like for prototyping for me, made the differences that, we could have just done a single prototype on paper, or once we had that like one tab thing, where like you choose it, it kinda opens a tab, we could have just drilled on that much more, but like for me, I was like to do not only prototypes using different materials, like paper, OmniGraffle, we did html, they are like a pure web page ones, and then also the add-on, all these things were like different versions of the prototype in different context in order to understand like as we get closer to something that might going into [the name of the browser], it does make a difference as you hit each one because I guess from my experiences, my grandfather is just like, you can't just leave your like, I don't know, for end everything just like a test that does this work, as soon as it wasn't working, he would try something else, or he would dumb whatever system it was using and like grab some coffee cans and then start using that and like build those into shelves and sideways, something like that. I don't know. It just always seemed like a constant process and like trying different materials in order to accomplish it, and so I think that's the piece that maybe stuck with me that I didn't...I mean, I don't' know if I am comparing in a way that school didn't impress that on me, but for me, when I got to that prototyping stage, I felt like I really understood it, and then I put a lot of emphasizes on having that happen, like often there is like a great debate about whether designer should code or not, I think if that's our responsibility, and I think it is, like I think at least, html, css, JavaScript can do most of things if you want, because it's just a canvas, and given the right set of tools like jQuery or something like that, or you can pretty easily like steal code from other people, and really kind of put things together, I think that is a key aspect to kind of doing any kind of work ever since software because there is a level of prototyping where you are just ignoring all the kind of technology that goes behind everything. Like in OmniGraffle, where you just wireframe things out and then like everything seems to fit, or especially, I use Photoshop all the time, like I could really layout everything in a way that I wanted to work. But, and I was really impressed by architects, and like architecture in terms of like design, I think they are kinda steps above. everything that software does are much slower in getting the work done. They, like the contexts of what architects are working in is so important, right? Like you can't take a house that's designed for Arizona and bring it into the Pacific Northwest, and just expect that would work because it rain so much here, it doesn't rain in Arizona and it's hot and like you know there is like the variations of like your environment that is like, they change everything about your design, and so that's like starting from paper, moving to OmniGraffle, moving to like html, and then like an add-on, all these things that you learnt something new on each step, and that's the part about prototyping that I think I didn't take from school right away like it seemed like it was a phase that you use that you are like is important to get done, but I guess when I was in school, it didn't seem something where they were like drilling in the fact that you have to move from these types of prototypes, the next type of prototype to like a next one, and each one has to get you know, you have to go more in context of what you are trying to accomplish. Yeah, I guess, I mean, I think that was part of the process, but just like not something that I like focus on until like I thought about how my grandfather works.

R: #01:10:21-7# So what's your role in this project?

P: #01:10:32-5# For the iPhone share project, I am the principle designer.

R: #01:10:45-6# So for this project, what is the final result of this project?

P: #01:11:19-1# So, right, so we essentially work through, and I almost present it a pitch to the [the name of the browser] team, yeah because I think the key especially with the idea, like how small it was, about you know we are just solving this one problem of copy/paste, opening a tab, what was really important to show metrics to say like how many people are sharing get kinda like evidence from people to say when we talk to people who were using it, like they often say how much more they realize they share now, and we could also see that trend as we follow an individual user who like shared once, like they would move from 1 share a day to averaging about 3 shares a day, after like a week or two, and then they will be like a steady rate of like 3 shares a day per user. So what we did is essentially like have a pitch to the [the name of the browser] team about like, this is really important, this is how its working and here is our prototypes, you can see it, we have at the time, we had like 75,000 to 100,000 users, and yeah from there, it developed into like [the name of the browser]'s certain requirements for how it runs things. So that's a different thing than what we were trying to accomplish. So like right now, it's like building into [the name of the browser], and I think it may come out into like [the name of the browser] 14, sometime at the end of the year. And I don't' know working on it at more, but like, because now it's essentially like a different design process, when you are doing things that got a small scale, it's really easy to kind of iterate and move fast, but when you have a product that's large and it has like a large user base, yeah you have to kinda do a lot more design around introducing this, like the software to people, and in different way, because like we are developing add-on that people weren't install it, so they will choosing to install it, so they already knew they are gonna have it. Like 500 million [the name of the browser] users can wake up tomorrow with like a new button somewhere they have, so we have to introduce that stuff, there is a whole new set of design problems there that my team doesn't work on.

R: #01:13:42-4# How much did you influence the design decisions of this project?

P: #01:14:17-6# I guess I like to kinda have some consensus, so I like to do in an approach where you have people kinda do some paper prototyping on their own, and it all comes together because to me, it reveals like what each person's real interests are, especially when you see the developers often like do a paper prototype that has things that you didn't think about, they are very tuned into the technical problems, and so that gives you an eye onto that stuff. In the end, because I was the principle designer, so everyone was looking to me to make the final calls, and what and how the things is gonna work and things like that, but I like having at least one other designer to work with there because then you could have some feedback from someone who also understands that process, so the guy [the name of Designer 6], that I was working with all of the time, we went back and forth on different pieces, and sometimes, we were just try things. So that was like that. If we weren't often come up with something, or there was a debate about what was the right thing, we would just try both.