SUBJECT G

what is your background, what area of work or study do you do?
I study computer science, i like to program primarily in java, and i have done electrical engineering before.

what type of Direction in computer science?
im more interested in the mathematical side, not really interested in databases, i like doing algorithmic problems and complexity theory, these are my favorite courses

you've used P5 in one serious actual Project?
it was still a hobby project, nothing commercial, but it was still pretty big, we put 100-200 hours into it

there were others involved as well?
yes, my friend who is on the opposite side of computer science, he liked creating websites and doing just the overall structure of the project and I was at the back end of the program. we matched our skills good.

how involved are you in the community for creative coding?
ive joined this facebook group where people post their p5 sketches and discuss things related to p5 and processing, further than that i have not been involved in any community but i have seen some videos on youtube from dan shiffman. but that is about as far as my involvement goes.

when and why did you learn P5?
it showed up in one of my recommendations once, these videos, i think it was coding purple rain and i thought it looked pretty neat, it looked intuitive and easy to use, i watched the video and thought i could use that myself, so i started making some sketches in processing first and then later in p5 because you could just do it in the browser.

and before that you already had programming experience in java?
yes, i did some courses in java

have you done web stuff before?
no, but i thought javascript seemed self-explanatory if you knew other programming languages

have you ever been involved in the development of p5?
no

could you tell me what your project was about and in what way P5 was used?
me and my friend we started wondering how many interactions between people in a WhatsApp chat we have a group chat on WhatsApp it's like 7-8 people in it and we were wondering about some metadata about the about the group chat so how can you visualise that so we made this website where you could send you your WhatsApp group chat history to, and then it would piped to a php script which would extract data from it, like who sends the most messages. this was then passed to the JavaScript part of the website. this is where p5 comes in. we decided to visualize

interactions between people by creating some sort of particle system so people would be represented by circles or spheres and the more these people speak in a group chat the bigger their spheres would be. it was like a graph, there were links between spheres and the more people talk together the more or the Fatter these links would be visualized on the screen so you could really see links of people that were really talking a lot with each other and that was really fun to see actually. it turns that people who had better bonds were also friends in real life. it was cool to see the visualizer visualize it pretty well.

you did this primarily for your friend group?
yes. we wanted to deploy it a bit more so other people could do it as well, but we ran into some privacy issues. not everyone wants to send a WhatsApp chats to a random email address

so you have not been able to test with other peoples data?
no not yet. we actually abanboned the project as well, because it took up a lot of time and we thought this is not really something people are willing to do, for privacy concerns.

why did you choose to use p5 for the visualisation?
it was my idea because i did not have a lot of experience with web design, my friend did, he said you can do you can just get a frame then you can put the p5 code in there and then it will be rendered correctly and yeah it was kind of because in p5 you just have to import the script and you create a canvas and then it just works so I thought easy and we can we can start creating stuff pretty quickly because it's a low threshold library.

so it was you who worked on the p5 part?
100% me

and the idea with the circles and the links, did you come up with that yourself or did you see some template for that somewhere?
ive had courses where we visualized networks like facebook like a graph, but the thing with the links, that was an original idea.

how was it to work with P5, was it really easy to work with it or did you have some issues?
it was really easy to work with, you create a frame and you start typing javascript code. i was testing my code in localhost and when it worked i would push it to the server and test it on the live site. so it was easy, you make a change, then you press play and it would play.

you wanted to have it on the web still?
yes, because my friend builds websites. so we wanted to incorporate it in a website.

was p5 the only choice or did you consider other options besides p5 for the visualisation thing?
no that's the only thing we considered because it was the only web thing that I knew could make these things. it was taking the easy road because i did not know anything else.

what would you see as the primary use case for P5?
well as it stands now i see it primarily for small sketches maybe a small logo creation or very non-detailed small animation movies. I don't know about the performance of p5 I don't know if it can be used on websites because you need to have good mobile performance if you want to use anything on your ???. i think it could be used for a lot of things.

do you have a favourite example for something like that you think this is a really cool thing you can do in P5 that you've seen seen on the web?
the way you program a particle system, multi-body and n-body system. it is great that if you program the forces of nature like acceleration, speed, distance into a particle system you can actually start to see the particles starting to orbit each other. that is really neat because you create nature from code.

do you have any other projects done in P5 that you think would be interesting to bring up?
ive seen some video clips from a producer for techno music, and i thought it would be neat to rebuild the visuals. i can send you the link. it looks like perlin noise. i tried for some time to recreate that but i stopped halfway, like an audio visualizer.

so you recreated it?
i tried doing it, with perlin noise, but it took too much time, and i have to study for other things.

and you thought p5 would be a good fit for it?
yes, because the video dan shiffman made about perlin noise resembled the video i was talking about

you have used D3 as well. any other tools?
D3 is really the other Javascript library ive used. i had a course called data visualization and we were supposed to use D3 for that. we would visualize the temperature for a specific continent, kind of boring stuff, and i quit that course halfway because i didnt like it.

how would you compare p5 to D3?
the most important thing is that D3 is way harder to setup, you have to write more lines of code to do the same thing. but it has more capabilities, but way harder to start up a simple project in D3.

Could you give a specific example?
there were some constructs in D3 where you had to loop over an array and you really couldn't do it any other way.

do you think that P5 could have been a better option or would it have been a worse option for the data visualisation?
I'm not sure, we were dealing with a pretty large amount of data and I don't know about the performance of p5. usually when you have programs that are simple to use then their efficiency isn't as large as as other more complex programs. Im not sure if we could have used it in the same way that we used D3, due to performance issues

if you were to think about a future project in which cases might you choose to use P5 and in which cases might you not use P5?
If I were to work at some creative media outlet like an online newspaper and i want to create a small animation for presenting something alongside a news story, i would use p5 for that, because it is easy to use, you can make it quickly, you can quickly prototype, animations for papers are usually pretty simple so you could use p5 for that.

would you consider using D3 in some case?
not really, i would really prefer p5, because D3s documentation is pretty sparse and i think it is created by one guy.

Any final thoughts, anything you thought of during the conversation regarding like P5 in general or creative coding in general?
the fact that there is this community that is created by the creators of p5 and daniel shiffman that is a really good part. this is really something you can open source pretty well I think. for a good open source project you need a good community engaged in trying to improve the product. that is a standout point for p5, that there is an active community for it.

Could you consider as well contributing to the project?
I would have to know javascript a bit more, because you need to understand the specifics of javascript and i know from previous courses that javascript is wacky sometimes. i prefer sticking to java for doing real programming.

why did you go over to p5, or could you go back to processing or is it always p5 now?
its a pretty long time ago that i used processing. i changed because it is easier to setup the p5 sketches. but i dont really know why i changed that.