## Recording 6 (March 17)

Degree: Bsc Computer Science, Minor in Business

Year of Study: 3rd

Gender:

Occupation (If working): student

Me: Generic questions around github and similar source code platforms. Have you taken any courses previously where you created projects or assignments that involve programming?

P: Yes, a lot of them.

Me: what's your most recent course?

P: Comp 360, a course about Operating systems

Me: What language you're using there?

P: Using C.

Me: Have you been involved in paid projects outside school assignments, for example during an internship or a job that involved programming?

P: Yes, I've been on an 8 month coop term so far and I was involved for a project with the company

Me: At the moment are you involved in any kind of programming project or work that is not a part of your school work or anything?

P: RN, I have my own github repository that I occasionally add stuff to for clubs that I go to, other than that I'm working on improving my own personal portfolio. And I'm Also trying to take an online course in web development whenever I get time.

Me: What clubs are you a part of?

P: I used to be a part of Vr, right now I'm just a part of

Me: what kind of projects do you usually participate in when you don't have any benefits associated with it as in you don't get any money or grade points for it?

P: I would say I take part in projects where I can say I learnt something new and can add to my resume as at the same time it is making something cool and adding to my skill set. Designing stuff aesthetically also interests me, so when I am looking for something, it is not just about the technical aspect of it but also about the end goal of the entire system or product. Eg. it could be a website or neurotech stuff. NeuroScience is something I am interested in so that's why I combined it with CS.

Me: Can you please explain in detail about your area of interest, in terms of project development?

P: As of now, I would say that I'm focusing on improving my web development skills. Building small websites using different frameworks, learning html, css, javascript all that stuff and eventually I would like to move on to learning Machine Learning and data science.

Me: If you're given an opportunity to develop an opensource project, do you prefer to work alone on these projects or do you like to collaborate with other people?

P: I prefer to work on the project in teams but it really depends on what the team is like. If the team doesn't suit my way of working or if I don't feel comfortable in the team, I'd rather work alone. The dynamics of the team I'm working in is a very crucial factor. I believe that if you're in a team and team dynamics are in place, you can get a lot more done.

Me: If you feel that team dynamics are not good, do you start working alone or do you sort it out since your preference is having people to support you throughout the development?

P: That depends on the situation because when it comes to open source projects, usually it is you become a part of the team by your own efforts. They make you go ahead and get into projects rather than projects getting assigned to you and you working on it. If the case if for open source, you're there and nobody is forcing you to be there, I would rather work on improving the team dynamics to make it work. If it doesn't work then I will have to see what I can do about it.

Me: Whenever you work on a project, which is maybe for your school or outside the school, do you publish your work online to let others view what you're working on or do you like to keep your stuff to yourself?

P: that also depends on what you're working on, if I am working on some project that has proprietary value I might keep it to myself, also if it is course work then I totally avoid posting online. But other than that anything else is for fun and I post it on github.

Me: your personal projects which are not associated with any kind of benefits, you post them. Like whatever you develop for fun like your web development and all, you post them?

P: yes

Me: How do you like to save your source code, do you save it in different versions or do you overwrite as you keep on working on your project?

P: I post it on my github repository so that essentially is the same as doing versioning of my work. I like to have versions of my work. I wanna add that even if I'm not using github or any version control system, I definitely like to keep versions of my work because you never know when you might need it.

Me: Have you tried to find collaborators for your project that you're working on at any point of time?

P: Yes, i have a couple of examples, but only one of them has been productive so far. One of them has been productive so far. Both are coops. As far as open source appears to me, I've not really participated in online open source development because i don't have too much knowledge of it even now. Like how to contribute to it effectively, but in person I've had collaborative experiences in coops.

Me: when you say coops it means that people around you, they would essentially work together in teams for money.

P: yes, in a club or coop it is a team that works together.

Me: If you do not find people whom you already know, do you go outside your known circle of people?

P: First instinct is to go on stack overflow and see if someone has asked the same question, if they have, there are very high chances that someone has already addressed that and go ahead with the solution they're proposing.

Me: but you haven't done anything like posting your problem on github or maybe on twitter where you post about your project on twitter to tell them you need help here?

P: No, I find help around me. Like, it is more casual and comfortable with friends. You talk about it and think together.

Me: Do you find time for development activities that involve contributing to the projects without benefits?

P: I consider those activities as self growth or hobbies, Like whenever I have free time in which I may be playing football or anything, I could very well be coding. So that is my free time that I use to do this stuff.

Me: Have you considered participating in the open source projects? Given that you do not participate, what stopped you from participating?

P: I've thought about it but I've not thought about it to an extent where I would say 'yes I wanna do this'. There are other things I wanna do before.

Me: So what stops you?

P: it is a combination of a lot of things, time is obviously a factor, not enough knowledge of how to do is another factor. Third most important factor is it is not giving any immediate value in return as compared to some other development activities. The returns of other activities are a lot higher than this.

Me: What are all activities (as in courses, club related activities, teaching assistance related activities to name a few) which involves school and work commitments do you participate in throughout the week that consume the majority of your time?

P: That happens usually during an academic term when I have a heavy load of mid-terms and assignments coming up, I can't do anything else, but at other times, I do have time to work.

Me: Do you have any hobbies outside Computer programming? (Don't tell me your hobbies if you're not comfortable as it is a yes or no question)

P: yes I have hobbies, I do pursue my hobbies.

Me: Would you say that you're someone who actively pursues your hobbies or you do it only during leisure time?

P: as of now it is a leisure time activity but I definitely wanna be more active with my hobbies because of time crunch and responsibilities.

Me: If you are on a vacation from work or school, would you participate in development of projects for yourself or collaborate with others?

P: yes for sure, I would take a few days off first and then start working, but i will work for sure.

Me: How do you store the work that you created as a part of Assignment or project?

P: I mostly upload all the code I write on github or private repository, for personal use.

Me: What all platforms do you use to store your work on? (Anything other than that)

P: Google drive, one drive for storage, no gitlab or anything else.

Me: Have you taken any course at school which involves using git in projects?

P: yes, I think just 1 course seng 265, Intro to software engineering, they taught us well.

Me: The task that you did in seng 265, Was the task meant to be done by a group of students or as an individual?

P: As Individuals

Me: Can you describe the task assigned during the course to you, that led to interaction with git. And what was the most challenging part?

P: Merge conflicts, I was new to git, getting used to the idea of doing it. It was challenging.

Me: do you say that you're more comfortable now with VCs vs back then?

P: Yes, a part of that confidence comes from the fact that even though I don't know all of it, I know what to look for online so that I can solve problems quickly.

Me: Are you aware of the process of generating pull request for projects, and have you generated a pull request in an existing project?

P: yes

Me: Did you know the owner of the repository?

P: Yes

Me: Was that pull request a part of a course, a part of a job, or was a part of the project you were developing out of interest?

P: there were 2 situations 1 at coop and 1 at the uvic club.

Me: What did you contribute to the project? (For example: edited the code, added documentation, fixed a bug, suggested an improvement?)

P: Club: I was cleaning code and fixing bug

Coop: It was a web service for which I had to write a business logic for I was designer and was pushing to my boss repo

Me: Was your pull request accepted?

P: yes

Me: Do you use the command line?

P: I use both, it was not github in co-op, it was their internal system.

Me: On what level of expertise do you rate yourself on github?

P: 4/10, I need to learn a lot

Me: Has your pull request ever been rejected? What was the reason given to you?

P: Haven't made many, the reason was that I was the sole person in charge of generating code, no one was there to reject it. Second one, I consulted with people before making changes.

Me: So there were code reviewers who would review your work in coop?

P: yes

Me: While browsing an existing project on Github, or when you're browsing the project for personal use and you come across a bug or improvement, do you raise an issue?

P: Usually I let it be, for the course we refactored code but did not make any pull request

Me: In case of course, you were being asked to do it, your natural tendency is not to create pull requests?

P: no

Me: How did you come to the conclusion that there is a reportable issue existing in the repository? Irrespective of the fact that you reported it or not?

P: chances are that if I'm in a repository, I need to use some of the code base that is present in it, when I'm trying to use it, I try to see if it works or not. That's where I find if it is working.

Me: So you fix the code for your personal use, you never report it?

P: Honestly, sometimes i don't even clone the repo, I directly copy the code. I don't really care about it too much, the author of the code cares about it more than I do, if they really want to fix it they will, unless it is some huge codebase that is being accessed by a large number of people.

Me: Was your pull request merged into the main repository?

P: I've had a few merge conflicts in some situations, it happened 3 times and all of those times I barely remember how they got resolved, my supervisor helped me with it. I need to work on solving merge conflicts.

Me: If you felt that there is some problem with the code, then why did you not raise an issue?

P: you can classify code into 2 types, for public use and for professional use right? And code for the public is more important to be running at all times rather than that for personal use. These large code bases are owned by private corporations. So when it comes to open source, there is a huge online community dedicated to those codebases. People here are highly competent to fix issues even before me realizing it so I would say essentially that it is a barrier, I know it is being taken care of by people who are smarter and experienced by me. Another aspect is that large corporations pay money to make sure their code is working and running at all times. It is not my job to worry about their work. The situation or place where my contributions could make code better for people are next to none, so I have never felt the need or urge to participate here as I don't have energy to put into it as it is not beneficial to me in the short run or in the long run.

Me: If the project was not opensource, but was from a private repository, would you still not raise an issue?

P: Then I will definitely. Because since that person is my friend I will feel more incentivised to work for them than some random stranger. Chances are if I am working on their code then I am involved with them in some way. Another point I want to make is if I were to be collaborating with someone in their work I will let them know that there is a bug.

Me: Have you ever resolved an issue on any repository?

P: yes, personal repo. Coop work, there was a code base web service within our app, those services were outdated and needed some editing to build more functionality on top of that, that is where I made changes, in clubs too or during courses I would keep making changes. I would do it all in a more closed setup.

Me: How did you come to the conclusion that the solution you are proposing could enhance the working of the project or is a suitable solution to the problem?

P: I don't really have to think that much, in my case it is closed work so it doesn't matter.

Me: Did you share your code snippet in the solution to the issue, or did you add a comment on your proposed solution?

P: I do both, it depends on the situation, if a person knows I am about to make changes I make them directly.

Me: Do you own a public repository on Github with an open project for which you're seeking collaboration?

P: no

Me: How would you feel about getting pull requests on your repositories?

P: excited and surprised.

Me: What benefits did you experience with working on Open Source projects?

P: huge community associated, support is available readily, doesn't require centralization of power, sense of equality, Without geographical boundaries.

Me: Do you mention your successful open project participation on your resume?

P: yes

Me: Have you ever participated in companies' opensource projects?

P: yes, but later, I am nowhere near it.

Me: are you aware that when you participate in such projects companies can hire you full time too?

P: no, I didn't know.

Me: What is your go-to website when you need help with your code?

P: Stack overflow

Me: Do you go directly to the stack overflow with your code problem or do you type your problem in the search engine and then pick stack overflow to view the answers?

P: I look it up in search engines, and stack overflow pops up.

Me: What kind of problems do you usually encounter in the code that you search for help online? (Checking for syntax, fixing errors, improving solutions...)?

P: Usually Logical, then comes syntax issues, last is improvement.

Me: Which computer programming forums do you have an account on?

P· No

Me: Q7- Do you usually get a good answer when you are looking for something by searching on stack overflow?

P: yes

Me: If you do not find the exact question then, do you post one question yourself? If no then why not?

P: Depends on the situation, if I'm working on a long term project I will post it online, as it takes long for people to answer questions, but not in case of quick responses.

Me: In the past 3 months did you participate in any way with stack overflow? (Eg: upvoted / downvoted an answer, uploaded a question, answered, was just there looking)

P: only looking

Me: Do you feel that you are a part of the stack overflow community?

P: I am using their content to create my work, hence I definitely feel that I am a part of the community.

Me: Have you ever reused a code snippet from stack overflow, or modified it to use it for yourself and came up with a better answer?

P: Yes

Me: If not to the above question then why did you not post the improvement back?

P: I don't care enough, mostly when I come up with an improvement, it is not something special and anybody can come up with it.

Me: If you see a lot of classmates posting on the slack overflow, how would that make a difference for you?

P: yes it does.