Michael Singh Self Reflection

After multiple delays on my first project, I ended up being switched to a new project about 4 or so weeks into the third quarter. Once I got switched to this project, I had to catch up on everything regarding the project. Originally, I had no idea what it was about or what I was doing and because of this, during the first week I tried emailing the advisors involved in the project to catch me up, but no one replied. I then emailed one of the students and he replied and told me I would be making a website to run an AI engine on.

After finding out what I was doing I was not as concerned as I was starting the project, but I still didn’t know any information on what the project is about. Eventually we had a meeting and finally I was able to talk to the advisor of the project who was Michael Thompson and the leader of my team who was Andrew and found out what the project was about. The project was for a judiciary located in Papua New Guinea and the team I got put into had to create an AI engine that would predict the sentencing of the person who is guilty. In our case, we would be trying to find the sentence someone should get when they have murdered someone. The project defined that the sentence should be a guide and not an actual fact that judges can reference to.

After finding out the details of this project I knew this would be quite a difficult task to complete especially within the number of weeks we had with the project. Luckily for me I was the person who had to make the website for the AI engine to run on rather than the person making the AI engine. I have no experience with AI, so I would’ve been worried if that’s what I was doing as I know there is plenty of complicated processes to make one and to make it good and accurate. Even though I was the website developer, I still had to work on things that was related to the AI engine.

Immediately after our first meeting I was put onto data scraping for the engine. Data scraping was a way to collect information from sites and we would be able to use that information in the AI engine. When data scraping, we have to be sure we can scrape from sites that allowed it. We scraped the data on the public cases from the PACLII website which we were allowed to scrape from, and this task took a lot longer than it should have as the cases weren’t scrapable with online tools as the cases just had a block of text that we had to get information from. So, I had to manually scrape it from paragraphs of text which was one of the most time-consuming things I have done in this project which had such a little result and what made it worse for me is that when you search for certain information in the cases, sometimes it wasn’t there or I had to guess it if it was possible. For about 3 weeks I did this and nothing else.

After 3 weeks of manual data scraping, I was finally able to get started on what I was meant to be doing which is website development. I asked our client who is Alison from the PNG judiciary what she was looking for in this website and she told us that it should be easy to use and not much guessing as to what the website is about and that it should look professional. She originally said she wanted me to study colour psychology for the website and see what would be good colours which would attract people who have the mindset or personality of a judge. I did this and when I came back to her she said that the PNG national colours would be good for the website. As you can see, the research I did on colour psychology was basically for nothing in this project, but I did learn a bit from it in regard to how colours affect people when they see them and what colours are good for certain situations. Then she told me to make a couple designs so that she can approve them for the final design of the website. At this point I had already started making mock designs as our meetings did have a break in between them so thought I should get started on them but I eventually scrapped these ideas as Alison came to me with a list of websites which the judges used on a daily basis which I had to study and take ideas or common themes from those websites and create my designs. Eventually I came up with 5 or so designs but out of them I chose 2 to show our client and she seemed very pleased with one of them, so she showed other judges and they agreed with her, so we went with that one. I was also very happy that she and the other judges liked it since it was first time designing a website myself.

Soon after all that I began developing the website. This was quite difficult to start with because I was coding in a framework I have never used before which was Django for Python and I have also never coded in Python. Setup of the website took a long time since I was working with PowerShell to get the website up and running and it was confusing since I think I watched too many videos on how to do it but people used different ways to do it which made me confused on how it works but eventually I got it working and once it was done, developing the website began with me working on the homepage first.

UI went quite smoothly as most of it was HTML and CSS which I was familiar with already from courses I have done previously but it did take up a bit of time to get it done. Another problem did come up with the UI which was the responsiveness of the website on medium and small screens. Due to time constraints I was not able to get the website working on all screen sizes, but everything was working and looking good on a normal size screen.

The major final problem I ran into with the website was trying to get scripts running on the AI engine page. I was very unfamiliar with Python, so I really struggled to try and make anything work with it. Trying out multiple things to try and get them to work but it just kept returning errors and when I searched the errors, I was still not able to fix it. I think part of the problem for that was that I didn’t have the right packages installed on to my Python environment, so it didn’t run. Eventually I asked the leader of our team Andrew to help me out with it and he was more than happy to help me out. Since he was the person who was making the AI, he was able to quickly get stuff working on the website. He also gave me a copy of his environment to run on my PC.

Setting up the environment that Andrew gave to me was also a problem both of us ran into as it was running into errors installing the packages and I had to use Anaconda to get the environment working. I had to reinstall Python a couple times as well just to make it run. It took quite a long time with installation errors and if it wasn’t that it would be that the submit button for AI would return errors but eventually after going through the errors and installing multiple packages we were finally able to run the AI and website together on my PC.

During the project, a major concern of mine was how my team was doing with their parts. The leader Andrew and I were in contact from as soon as I got into the team and we basically knew what each of us was doing and also discussing the project on a regular basis. The other 3 members were almost ghost members for me as I had barely any contact with them throughout the project and one of the members I didn’t even see once throughout the whole project but he did end up leaving the project early on because of some issues in his life so this was probably the reason I didn’t see him. It seems like Andrew had been in contact with everyone and knew what they were doing but for me, I had no clue and towards the end, one of the advisors did say that we were meant to go and work on our own individual parts so I guess the team aspect didn’t really matter at the end. This was mostly true for the most part but I felt bad for the Andrew as he had to work on the AI on his own and was saying to me towards the end that it would’ve been nice for him to have people to help him out with it. I think since we are a team that we should be communicating with each other even if what they are doing is different since the parts are still connected in some way.

Another concern I had throughout the project was that none of our advisors checked our work. Even though we sent through our weekly time sheets with the activities we had done, I still think it might have been a good idea to prove the work we have done on the meetings we had once a week and this would also justify our hours and be used as proof when we are getting graded. We usually discussed what we did but I’m assuming that because this is our final project that we should be doing everything individually and if we really didn’t do the work, it would show at the end.

The reason I bring up checking work was because it seems like not many of the people really did as much work as they were saying. Throughout the project they didn’t show up to regular meetings and other inconsistencies have shown up but there was a point where it made it obvious. During the end of the project when submission was about 2 or so weeks away a certain member definitely said some interesting things which came across as they haven’t been working on the project. The member ended up kind of blaming Andrew and I for their mistake since there were things we discussed as a group that we would do but the person didn’t do them and made me frustrated since both Andrew and I had stuff to work on already, that member said we were getting angry at them when we said it’s not our problem and that its more on you since we were just trying to finish our parts. The other part which is frustrating is that the person had a lot of time to come up with something at least but they were still asking questions which should’ve been asked when they got the task, not with 2 weeks left until submission and presentation. I also felt sorry for Andrew as he already had to do so much and didn’t have any help from others with a lot of the work at the end but still tried helping this person. I was a late comer so I tried to finish my parts and make sure it was ready for submission and couldn’t help him as much as I wish I could have.

Aside from that stuff, it was my first time working from home. Working from home was a new experience but it was great as I could work on the project anytime within the day. Even though working on it anytime was nice, I had to make sure I didn’t get distracted from doing the work. Being at home does make you procrastinate and make it tough to just start working on it for a long period of time. Eventually I started planning out my days to make sure I would do my work which was also a learning experience for me since I have never worked from home like I did with this project.

This was also the first time I was working with a client which taught me how interact with the client and we had regular meetings to make sure she is happy with where we were at with our work. She was very helpful in giving us ideas. Since she usually asked for what we have done during the week, it really kept me motivated as I didn’t want to disappoint the client with the amount of work I had done weekly. I was sure she would contribute to our final grade, so I made sure to attend as many meetings and keep her updated with what I was working on.

As for practical skills I picked up during the project would be related to learning more about data scraping and learning Python and Django. Looking for tools that would help with data scraping taught me about data scraping even though I couldn’t use it in the end because I had manually do it, but I still had experience using some of the tools that were found online.

Python and Django were quite different from other coding languages I had used because I had to download a text editor and use PowerShell to work with it. Confusing at first but I got the hang of it eventually and learning these things was enjoyable for me. I’m very happy that I was able to learn it too as Python is one of the most used platforms for coding around the world nowadays and is used by so many businesses so it is great for me as I didn’t have to learn it in my own time and had practical use for it.

During the designing phase I used Photoshop to make the designs which gave me more experience with it as it had been a long time since I last used it. It was also a way to show my creative side even though I was limited to using certain details such as colours and themes which were common in other websites, I still learned a lot from it and this was one of the more enjoyable work I did for this project. This also taught me to look closer at details that may not be apparent at first, but they are usually common throughout the websites.

Something I wish I did differently would be to do my hours calculation different from how I did them. I only included the work I was doing throughout the project rather than everything related to the project like meetings. In the end it became a problem where I was under the hours I was supposed to do by a 100 or so but luckily a teammate had calculated the hours of meetings and other conversations we had so it wasn’t that big of a problem at the end but if he didn’t then there would’ve been a problem trying to calculate my hours for the project.

Another thing I would change would be to get more involved in the AI part of the project. I think it would’ve grown my knowledge if I really got into it. The experience with AI would be good as it could help for the future if the opportunity for a similar job appeared. It would’ve made it easier on Andrew too as he was telling me it would be nice if other people helped him with it. If I didn’t join so late, I think I would’ve worked on it with him eventually.

Overall the project went well for me. I learned a lot of knowledge not only practically but from listening to conversations we had with our advisors and how to approach situations. Besides a couple worries and problems nothing went terribly wrong and due to the nature of this project being more of a research project or building the foundation of it and with the amount of time we had, nothing went amazingly well either. The project was quite calm in the sense that no one was expecting something concrete or complete but as long as there was something to show in the end, that would be enough, at least that’s what I got from how the client and advisors talked about it. The project is probably for the people next in line to not have to mess around trying to figure out what to do but already have a solid foundation so they can continue and or do it better from our failures and successes. If it does continue, I hope it turns out well for them.