

Coursework 3 Project Log - S1732368

Day 1

Plan

The first plan of a successful completion of the project is to sit down with my partner and divide up the different tasks between us. Us both attempting to write code when we are not together has the potential of being chaotic, so I think it is best that we each take different tasks. We next need to figure out how similar this project will be to our design in Coursework 2. Fortunately, I have plenty of time to dedicate to this project, particularly most mornings and evenings.

Achievements

Today we sat down and read through the Coursework description, making sure we both understood it. We have come to a decision on how we should structure the project and a rough idea of what tasks each of us should take. This initial discussion took roughly 30 to 45 minutes. We then proceeded to try and set up Eclipse to work with the coursework. This whole process took around an hour as there were lots of steps and plenty of difficulties along the way. After Eclipse was working we created all the classes. Finally, my partner helped me set up a GitHub account so that we can work on the project when we aren't together and easily send our progress to each other, and after that thought we would need and called it a day.

Reflection

I think I have a good grasp of the coursework. I do not see it getting too difficult but I predict it will take plenty of time as there are plenty of tasks and reports, such as this, to be written up. As long as things do not get more frustrating than trying to set up Eclipse then I think this coursework should go well.

Day 2

Plan

I plan to read through the provided classes and understand their function and structure. Also, understanding the provided test, I think, should provide some good guidance on the functionality of the overall project. It seems as though I will be working on writing the system code while my partner will be writing the tests. When he writes his tests he will send them on to me allowing me to add the functionality that the test is testing. Throughout the development of this project we will hopefully be following the ideas of test driven development, to ensure bugs are located as early as possible, or even before they have the chance to surface.

Achievements

I have made good progress on the project, with most of the functionality in place. I initially went with the design of our original plan from the previous coursework, but while actually trying to implement it I saw that certain classes were not necessary and some methods belonged in

classes I didn't originally consider. I conveyed these changes to my partner to see what he thought of them and then implemented those we agreed on. I have used Piazza to clarify some of the details that were a bit more ambiguous in the coursework, as to maximise the potential marks I can achieve. I have spent a number of hours writing this code and it is managing to pass most of the JUnit tests. I am getting a bit tired though and can see my attention wandering, so I think I will stop for the day.

Reflection

The work I have done today has gone mostly to plan and any changes have been easy enough to deal with. Writing the code for the classes is taking a bit longer than expected, with the most difficult part probably being understanding and using the classes that were provided to us. I am still optimistic that we will finish the project in good time.

Day 3

Plan

Today I plan to finish the coding and ensure all written tests are passed. I also hope to add the logging code to the project, leaving only the project report left to do.

Achievements

I have managed to complete the coding for the system, with it passing all of the JUnit tests that we have written so far. I have also added logging code to most of the system, but not with a lot of detail, just at the start of each method. Today I again spent several hours

Reflection

I am pleased with how far along the project that I now am, hopefully only one more day is required to finish any more tests that may come up. I think I should also return to add a bit more detailed logging code, just to make clear the flow of the system. The switch from ArrayList to HashMap has made me realise that I probably should have spent longer planning these sorts of details before I started writing the code. If I have been more rigorous in my planning, these sorts of pains could have largely been avoided throughout the development. At this point, all that is really left is the last few touches on the code, finishing this project log and writing the project report. The end is definitely in sight.

Day 4

Plan

My plan, for hopefully the final day, is to finish up any tests that may remain, improve the logging code and write the project report. I feel that the logging code can be a bit overwhelming with every getter producing a log, so I need to scale it back a bit. By the end of the day I should have this coursework completed.

Achievements

I managed to make my code pass all 29 tests that have been written. I also added logging throughout the code, at different levels, to make following the flow of the program easier to

understand. I added logging code for each status and only added it to the start of the the most important methods. Finally, I tidied up the code so that it conforms to Google's Java coding conventions. My partner and I wrote and finished the project report which did not take too long. Today I spent about 4 hours finishing the coursework.

Reflection

Overall, I am pleased with how my project has turned out. I feel as though the code meets most of the requirements with a fair amount of robustness. The logging code and project report give a clear idea of the structure of the project and this report explains, with a fair amount of detail, the approach and order I took when completing this coursework. When it came to working as a pair, dividing the coding and the test writing between the two of us definitely seemed like the best approach. Pair programming wasn't that viable as meeting up regularly would have delayed progress in the coursework. Using GitHub was indispensable when completing this coursework as it allowed the both of us to work on it separately without many conflicts occurring when we work on the same file and not needing to both be around when we are sending each other files.

Overall time division

About over an hour was spent on initial planning for the project. The majority of my time was spent writing the code for the project, with roughly about 10 hours spent on it. I spent about 2 hours deciding on and writing the logging code for the project as I was going back and forth on the level of detail to put in. This project log took me 1 or 2 hours to write over the days I added to it and the report took me about 2 hours as well. So, overall I spent about 16 hours completing this coursework.