CSSE1001

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Assignment 3 – Reflection

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This assignment is by far the hardest but most enjoyable at the same time to me. I spent days just for studying about new modules and countless hours coding and debugging. Although I dropped some features and have not completed/perfectise certain features, I am happy as I gave in all I had.

So far my test runs showed positive results, with errors being handled and so on, but if given more time, those errors could have been prevented. There might still be bugs under the hood, but yet to be discovered. Since this is my first time doing real coding in Python, my knowledge is not sufficient to allow me to achieve certain tasks. For instance, I wanted to implement drag and drop using PyQt instead of Tkinter, but due to time constrains and lack of documentation that I can understand, I fell back to Tkinter again. The dual panel mode of the file manager is not complete too. Trying to make one Tree Widget working was already taxing enough, therefore I had to put that aside. Previews of image and audio files, again, was dropped due to time constraints.

With one whole paragraph mentioning about having insufficient time, it is very obvious that time management was my biggest problem. Being an Engineering student, I have other subjects to be taken care of, not forgetting my daily life. I had underestimated the complexity of my project. Although I can say that the command line tools are quite solid, but I have to admit that I spent too much time refining them. Only towards the ending, I realised that I have set my target too high. My project had a dual interface, which meant twice the workload. Luckily, I managed to come up with a working GUI in the end.

I have made quite some significant changes towards my code structure when compared to the initial design document. In order to make my code reusable and reduce repeated codes, I have added more classes and even organised them into folders. Due to that, future development of this project will be much easier as one can simply inherit from any of the classes and overwrite or add more methods. I could have made a sample plugin, but I realised that my command line interfaces and GUIs are already doing that, which is something that I am quite proud of.

The GUI layout has changed a little when compared to the initial design document, but overall they are still very similar (with only widgets for dropped features removed) because when I wrote the initial document, I had Tkinter in mind since I used it before. Therefore, I

learnt that I should never attempt to use another GUI library if I never study it well enough. One whole day was wasted because of that.

About the efficiency of my code, I think that it can be considered as average as I tried my best to filter out useless codes and simplify them. So far, I found that the only factor that could really slow down my application is a slow Internet connection. The GUI interaction might be a little unresponsive at times (haven't discovered why), and I have yet to discovered a method to solve the progress bar problem as Tkinter is single threaded, but I was trying to do something that hogs up the single thread (loading and creating a tree view recursively).

In conclusion, I am very satisfied with this project as I managed to come up with something although I really tested to my limits. I really learnt a lot about Python, and I will definitely continue to program with Python and of course, refine my application.