Final Reflection - Object Oriented Programming

Object oriented programming as a concept and a tool is something that I knew little to nothing about prior to studying this module. With regards to my own interest in the different disciplines within Computer Science, practical programming and software development have always been rather low on the list compared to topics such as computer ethics or cyber security. This combination of a lack of prior knowledge and a diminished interest in the topics within this module led me to lack confidence at the initial part of my studies, however I was determined to try and gather as much knowledge as I could to become a more effective professional.

One of the initial surprises to me within the module was the introduction of UML as a planning tool. This was, again, something that I was not familiar with prior to starting this module. I was fortunate that a lot of the language and diagramming techniques were slightly familiar to me, I have used basic flowcharting application in a similar way to those used to create activity diagrams for example. I found this part of the module to be deeply engaging and found myself quickly able to identify not only ways in which I can apply this to computing work, but how some of the tools may also be beneficial to other aspects of my professional life. As someone who isn't currently working within the computer science field, being able to take some of the tools from my studies and apply them to my current work until such a time where I can transition to my new career is something I am more than happy to utilise. For example, I have been able to utilise use case diagrams to show how the different departments in my current employment liaise with each other and who is reliant on who. This also allows me to ensure that I am keeping these skills up to date, as I

anticipate that they will be of vital importance to me as a computing professional in the future.

Turning now to the practical skills of programming within an object oriented programming framework, a honest self-reflection on this would force me to admit that while I have made progress with my skills in this area, I still have a lot of work to do to become someone who I would identify as a professional object oriented programmer. The experience with this has been eye opening to me on a personal level especially, as I admittedly have never found myself struggling to grasp a part of my studies in such a way before, which in some sense has shown me that I cannot rely on simply being able to pick up things straight away, and that continuing to work towards my own professional development is essential.

As I stated earlier in this piece, I came to this module with little personal and professional interest in actual software engineering and programming, however this has changed slightly as I have gone through this piece of study. I think that being able to see a practical application of object oriented programming like the one seen within the driverless car assignment has given me a stronger appreciation for this part of computer science. By my own admission, I was rather intimidated earlier in this module when I saw the assignment to write code to support a driverless car, but having completed the assignment I feel encouraged to continue to learn these skills. From a personal perspective, I have been able to identify how object oriented programming may be able to help me with some of the aspects of my professional life that I struggle with, such as organisation and time management skills, and I

intend on beginning the process to create a programme to help me with this, something I wouldn't have thought possible before this module.

One thing that I continue to struggle with as it pertains to my studies is working with others in a collaborative way. Having spoken to other students on the course, it is clear to me that some of them are further along in their computing careers than I am. While I shouldn't allow this to intimidate me, it has in a way and this has led me to shy away from making contributions, despite me feeling able to do so. I intend on working to improve this aspect of myself, and will go forward attempting to be more assertive in these situations.

Going forward within both my studies and my professional life, I believe that there are key skills that I have developed within this module that I will be able to use. My knowledge of Python continues to grow with new tools such as encapsulation, polymorphism, classes and more. I believe that my system implementation assignment, which ended up being over 100 lines long and ran without error, is testament to these skills. I have also gained new skills within UML and the pre-programming process, such as the ability to create complex diagrams to demonstrate my ideas and how these will look once finished. I feel empowered to begin to look at working on some of these skills independently in the future, creating projects that can be shown to prospective employers for example, as well as for my own personal satisfaction. I also believe that some of my anxieties about my studies as a whole, a sort of "imposter syndrome" as it may be called, have eased, leaving me to feel more enthusiastic about the progress I may be able to make over the next few modules that I am to complete. Overall, I am glad that I had the opportunity to

complete this module, and believe that it has been beneficial to me not just academically, but personally as well.

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