Unit 5 - Reflection:

This week, I have been fully immersed in learning about Python's object-oriented programming. My primary focus has been comprehending modularity in Python code, which has involved utilising abstract classes and exploring approaches like modularity, Python interface, inheritance, aggregation, multiplicity, and composition.

The unit began with a lecture on Classes. I learned about creating an object-oriented program using Python, the role of a constructor in Python programs, how inheritance supports object orientation in Python and Java and organising an object-oriented program in a namespace and package. Abstract classes serve as blueprints for other courses, providing a standard interface for derived classes and promoting modular design and code reuse.

In this unit, the ePortfolio Activities focused on polymorphism and how inheritance can be implemented, including polymorphism, aggregation, and composition. As part of the summative assessment for the driverless car, I was required to create a Python program that utilised polymorphism, which I documented in my ePortfolio.

This unit emphasised the importance of packages and namespaces in variable naming to avoid naming conflicts and ensure code clarity, readability, and maintainability. I have documented my findings in my ePortfolio.

Throughout this unit, I have updated and improved my ePortfolio, documenting my growth and achievements through ongoing reflection and documentation. This process has facilitated my learning and provided a valuable record of my accomplishments and growth.

Unit 5 has substantially expanded my understanding of classes in Python and introduced me to additional features and techniques related to object-oriented

programming. I have gained practical skills and more profound knowledge of modularity in Python code by exploring constructors, abstract classes, polymorphism, aggregation, and composition. These concepts and skills will be essential in the upcoming summative assessment and further contribute to my growth as an aspiring analyst programmer. I am excited to apply them in the following weeks of the module.

Apart from all activities from this module, I confess this was also challenging. It has been a difficult accomplishment to read, research, and code. Even though I have several notes and feel that I am working towards a beautiful end when it approaches the first assessment, I have the feeling that I am missing something, and this is where I start to feel confused about where I should concentrate my efforts more, and what I must do first to have all the necessaries inputs to fulfil a success assessment. I recognise my lack of expertise in UML diagrams, but I am working to make it well and succeed in the upcoming tasks.