

Assignment 5 – COSC 3506

This paragraph outlines my key takeaways from COSC 3506, Software Engineering. A central concept I grasped in this course is the software development cycle, understanding how software is created from scratch. Firstly, I learned about the SDLC (Software Development Life Cycle), its different types, such as Waterfall, Agile, Hybrid, Spiral and V and the situations that pertain to these models. Secondly, I learned about software architectures such as Monolithic, Microservices, MVC, etc. and areas where they thrive and where they do not. An important design principle about making an architecture is “Low coupling, High Cohesion”, which means to have limited interdependency between components but at the same time achieve one unified purpose: the reason for making the component. Lastly, I found the use of Version Control services like Git and GitHub quite useful. This allows multiple developers to work on a single project, adding multiple features and remotely pushing changes to an online repository. This allows developers to track their changes and facilitate parallel development.

A challenge that I am facing is making a software from scratch, since before this class, I had limited knowledge on making a full-fledged software, and only knew about making 2-3 classes interact with each other. However, by following the guidelines for planning and executing the development of a software using tools like GANTT charts, making formal documentations of software expectations, knowledge of development cycles and articles from the web, I am now better equipped to navigate what initially seemed overwhelming.