Matthew Schlager Team: HWS

**INTRODUCTION**

For senior design my group has come up with the idea of creating a web application designed for saving and sharing code snippets. This can range from simple functions and code logic to an entire file's worth of code. Users will be able to post their code publicly and privately and search through other users' public posts. A comment system will also be inplace for users to communicate on specific code snippet posts. From an academic perspective and diving into specifics this will be a web application that uses a javascript framework to display and allow for user interaction. This will build upon team HWS’s experiences in co-op and academics, increasing our understanding of full-stack development and the process of designing and organizing a project from start to finish.

**DEVELOPMENT**

In evaluating the classes I have taken there are three primary courses that I believe will aid in this project's development. First being Data Structures (CS2028C), this class focused on object-oriented programming, types of structures that can be built, and worked with. These are core principles in a web application, the foundation established in the class will guide this team to the design of the back-end of this web application. Second is Database Design and Development (CS4092), this class serves as an introduction to SQL and database language. Lastly is Software Engineering (EECE3093C), which focuses on the process of designing and building a piece of software. This by far will be the most valuable because it provided experience in how to properly document and pace a project as a team.

There are many technical and non-technical skills that were gained in my co-ops at Fortech LLC. As a web developer my primary job was the building and maintaining of MVC web applications, this is a skill that is directly applicable to this project as it is a web application. Technically at my co-ops I gained a high level understanding of c# and SQL which will both be used in this project. Two of the most important non-technical skills I acquired would be communication and teamwork. These were primary objects for each semester which were worked on through team projects and weekly meetings with fellow developers to review ideas and work. As a group this team must be able to regularly communicate and work cohesively together towards a common goal.

**MOTIVATION**

I am motivated to work on this project because the idea proposed by my team is actually something I would make use of and enjoy having as a web application. I personally have kept notepads filled with different code snippets that I knew would be used in the future for easy access. Traditionally at certain points I end up losing track of the files and losing the code, so a public web app with high level search and filterability would be of good use. The primary design process will most likely include outlining of use cases, and from there designing a barebones system to accomplish said cases. HWS will meet regularly over the next few weeks to iron out this design. We are going to act as the primary users and design it in such a way that it meets our needs.

The expected result will be a web application capable of storing users code snippets both publicly and privately, while providing a space for discussion and rating. Each member of this team will be expected to perform relatively equal work towards the end goal. Early outlines for each member's job will be designed so that no one person is doing all of or none of the work. Determining the completion of the project will be based on the completion of all test cases outlined for the application. If test cases exist that are not met, the project will be considered unfinished. Whether or not the program is considered a success is based on the useability of it’s interface and whether the test cases were met at a minimal or exceptional fashion.