**Individual Capstone Assessment**

**Youmin Zhou**

For the Senior Design Project, our team is planning on implementing a fitness web application that will be data-driven. We aim to create an interactable website that provides an intuitive software solution to tracking and maintaining a healthy lifestyle using data science knowledge. The web application should allow users to track dietary, sleep, and exercise information. The user data can be processed by specific algorism to provide suggestions and instructions to the user.

A variety of college classes benefit the hard skills portion of this project. Data Structures (CS2028C) and Python Programming (CS 2021) should be the course that trains me in the fundamental idea of programming and how to think as a programmer. The Software Engineering (EECE 30093C) course also gives me ideas on how to plan and implement a software project. Database Design (CS4092) and Cloud Computing (CS 5165) also provide me with some technics that can be used when processing user information and any function that needs implementation in the project. At the same time, some knowledge from Design and Analysis of Algorithms (CS 4071) will also help handle the user information with the functions of the project.

My Co-op experience will be beneficial to this project. I was the website developer of the software department of U.S. Bank. Although the technics and development tools are relatively conservative and old-fashioned compared to the small company, I still gained many experiences in coding, implementation, web development, teamwork, and task management. Hours of learning and working in a professional environment also helps me in this project.

I am motivated to work on this project, and I am excited to see the project be constructed from scratch and experience the whole process. At the same time, I am excited to work with my team to accomplish a goal we share. Another motivator for me in this project is getting to work with the team and learn the technologies they use and the knowledge they have. This project is an excellent example of putting all my skills and computer technics together and putting them into a single object.

Our approach to this project is to stay with the development procedures learned from the Software Engineering course. The development goal is to create a functional application based on a web application that helps track, monitor, and give recommendations for a user's health. Our team will share a connected git repository to track code changes in story branches. The story branch will go through a series of tests that lays out the expected behaviors of the new features, and then it can be merged into the main branch. This project's expected results and accomplishments are to have a functional web application that can perform the primary function designed to work.