

Molly Vongsakhamphouy  
CS5001 - Assignment #3  
Individual Capstone Assessment  
9/10/23

Our senior design project focuses on creating an online platform to teach people about cybersecurity. This platform will explain cybersecurity concepts using clear visuals and easy-to-understand explanations. The topics we cover are similar to what students learn in the CS 4065 course, which deals with Computer Networks. We'll use JavaScript as the main programming language. For the technical backend part, we're using Node.js, and for the user interface, we're using React. Depending on our project needs, we might create a database from scratch, and we're considering using MongoDB or Postgres for that.

As for my academic background, there are quite a few courses from previous curriculums that I will use in developing this project. CS 4065, as mentioned previously, is a key reference for our content, and we're lucky to have Professor Giovanni Abuaitah, who taught us this course, as our project advisor. Additionally, courses like EECE 3093, which covers software engineering, and CS 3003, which teaches programming languages, have given us important skills in software development, such as designing software, testing it, and maintaining it. I'll be the main person responsible for the technical back end part of the project, and I plan to use these skills from these courses to make good decisions about how to build it.

I plan on using the soft skills I've gained from my co-op experiences as a software development intern at NAMRU-D and GE Aerospace to function well in this team environment. These experiences have helped me develop skills that are important for working in a team, like communication. In both roles, I had to work in situations where some team members were in the office, and some were remote, so being able to communicate well was crucial. I'm confident that I can contribute effectively to our team, whether we're working online or in person. Another important skill I've gained is adaptability, which means I can quickly learn new things and adapt to new situations. This will be crucial for our project because I'm new to web development, and I'll need to learn a lot to make it work.

I'm really excited about this project because I have a passion for creating things and teaching others. I'm looking forward to using JavaScript, a programming language I've been wanting to work with, to build something that will be helpful to students like me. To get started, I'll do a detailed analysis to figure out what we need to teach and how we should do it. I'll also work closely with our advisor, who knows a lot about the subject and the technology we're using. These concepts include cybersecurity topics and the development stack we will be using on this project. I plan to learn what I need to know quickly and effectively to make this project a success.

Our goal for this project is to create a platform that's easy to use and teaches people about cybersecurity. We might not have a perfect user interface due to time constraints, but it will work well. To gauge how well I'm doing, we'll set clear goals and check our progress regularly. I have experience with project management methods like Scrum and Agile, which will help us stay on track and make improvements as needed. I'll also get feedback from my team members and potential users of our platform to make sure my work is effective and make any necessary changes. This way, I'll know if I'm doing a good job on the project.