

Individual Capstone Assessment
Aiden Huff

Our senior design project is to create a mobile and desktop app. We will use github to collaborate as a team and develop the app. This app will offer users valuable guidance on relieving muscle soreness by selecting specific muscle groups from a 3D visualization of the body. Given America's reputation for health issues and obesity, our goal is to support individuals seeking a healthier way of life. The COVID-19 pandemic has spurred a growing interest in fitness, and we want to aid those recovering from intense workouts. This app will strive to allow for people of all fitness levels to work on their physical health.

Being in Electrical Engineering and not Computer Science means that my coursework may not directly relate to the project. An exception to this would be EECE-1080C "PROGRAMMING FOR ECE." This was a C++ focused programming class that took us through the basics of logic using C++. This directly relates to the project as it gave me a strong baseline for my programming knowledge in the future. Also, both "ENED-1100 ENGR DESIGN THINKING I" and "ENED-1120 ENGR DESIGN THINKING II" gave me experience programming in various languages. A few other classes that do not necessarily directly relate but did help me learn how to problem solve and understand the field more were "EECE-2060C DIGITAL DESIGN" and "EECE-3065 SIGNALS AND SYSTEMS."

I have had a wide range of co-op experiences involving a lot of different areas of engineering. The co-op that will most directly impact this project was my experience at Pantomath. Pantomath is a data pipeline observability and traceability platform for automating data operations. I worked as a software engineer to automate github processes. I used vscode to package bumps within our system whenever pushes to the main branch in our repository was made. I spent almost all of my time scripting and learning about coding processes, this will obviously directly relate to our work on our project. My other co-op experiences included cybersecurity at CBTS and sales engineering at Mazak. My time at CBTS was spent programming security tools in python that were used both internally and by our customers. At Mazak I learned a lot of useful skills about working as a team.

I'm highly enthusiastic about this project due to my extensive background in fitness and health overall. I possess both a wealth of experience and a genuine passion for this field. I have spent a lot of time personally studying this topic. Also, I am very confident in our team and our abilities. We are a group of hard working people with different strengths. Being from different majors we will be able to tackle any problem we face. I am also excited because of the ability to be able to build an app. I am very interested in app development

When approaching the initial steps of designing our product, it's essential to begin by defining the app's objectives. It will be important to put ourselves in our customers' shoes to see what they would want out of the app. By doing so, we can outline the necessary components and further break them down into specific tasks for development. My expectation is that by the end of the project, we'll have a fully functional app that's not only user-friendly but also visually appealing. In terms of self assessment I will need to make sure I am doing the tasks we decided are assigned to me. Whether or not I am slowing down production will also be a good indicator of whether or not I am being helpful.