

Our senior design project is about designing a product for people experiencing soreness. This application will most likely be a website that presents users with a 2D or 3D model of a human body. Users will then be able to select which part of the body they are experiencing soreness and be prompted with helpful tips to aid with soreness. These tips will include but are not limited to helpful graphics explaining stretches, videos demonstrating how to perform stretches, helpful links to articles related to pain experienced by user, and hopefully much more. This application will require an extensive database to support the many body parts of a human body and their ailments. The app will also require a hefty amount of design work to make the application appealing.

My college experience will help a great deal in the completion and success of this project. One experience that comes to mind immediately is ENED. During ENED we as students were forced to collaborate with a team of 4 to tackle an engineering task many of us had never delved into. This experience assisted greatly in teaching me to learn efficiently, communicate well, and think outside of the box. These skills are directly applicable to the project we will soon begin on. Even further than these 3 skills during the ENED semesters I was able to procure my coding skills. I solidified lots of things I had been taught in high school by watching my code “come to life” in the robot my group had created.

Straying away from academics my co-op experience will also aide a great deal to the success of this project. Throughout my semesters with ITI as a software engineer I have been able to see a plethora of different languages be used and interact with each other. The product my company sells at ITI uses a vast array of languages simultaneously working together to accomplish its goal. However, my team that maintences this code is very small, which is very beneficial to my growth in diversity with programming. I get to see full scope how different languages interact with each other and have a wide range of experiences in both frontend and backend coding that will come in handy throughout this project.

My motivation for this project comes from personal experience and seeing a lack of products like the one were seeking to create in the market today. Recently I have been getting into running and this has led to lots of soreness and pains

throughout the last few months. Luckily I have close friends that can help teach me stretches and different sorts of PT to help with these issues. However, there have been a few times I have gone online to find stuff on my own and I have had a difficult time finding the correct stretches due to my lack of knowledge in the sport. I have had trouble figuring out the specific name of the muscle or tendon causing me pain and end up looking at anatomy diagrams. This would be much simpler if I could just find the diagram point or click to which area hurts and immediately receive results of things I can be doing to aide this pain.

A base level I see us reaching is ensuring that the bare minimum capabilities of the product allow users to select from a broad muscle group focusing on the legs, arms, and upper back. This bare bones app would then produce one to three graphics or helpful articles providing information pertaining to the hurting body part. I believe that just equipping our application with these few things will create an extremely firm foundation for us to expand on if there is ample time. I think a good way to ensure we have a done a “good job” is by evaluating ourselves in usability, practicality, and clarity through simplicity.