Aaliyah Loechner Individual Essay Fall 2023

The project my team and I have chosen to pursue will be a "gamified" take on a productivity tool. From my perspective, this would take in user input for tasks they would like to complete, and would reward the user somehow as they mark tasks as completed. The goal is to make being productive fun for users, even if the task is mundane and just needs to be done. As developers, we will need to think of what would be the most effective method for rewarding users. We would also need to make the application extremely user friendly, so that using the tool doesn't feel like an additional task that must be completed. Perhaps there could be rewards just for opening the app. In my mind, this would be a tool for daily use that users go to in order to improve their daily lives.

There are not many classes that I can specifically point to that will be applicable for this project. My programming skills were developed over time throughout my college courses, though I do attribute the discovery of my interest and talent in programming in many different languages to Engineering Design Thinking I (ENED1100). A lot of my actual web development skills came from my co-op experiences, which will be discussed in detail later in this essay. However, one class that I know will be a huge help to me on this project is a course I'm taking currently. I chose this course, User Interface Design (CS5167), to further my front end design and development skills. This class looks at first finding user needs then iterating on different design possibilities to find the best solution before fully implementing the solution into a working application, which will be super helpful experience and knowledge to have while working on this project.

As aforementioned, my co-op experiences will likely prove more useful to me for this project. For my final three co-ops, I worked as a Software Engineer Intern for Raytheon Technologies (RTX) helping to make improvements to an existing application used by project leads to keep track of project progress and issues. I learned how to utilize Angular and how to program in HTML, Typescript, and CSS. I also helped with backend documentation in YAML. All of this experience will help with the design and development of the project. Additionally, I worked remotely and gained experience maintaining contact with team members, breaking up big tasks into subtasks, and keeping track of work progress. I feel confident in these soft skills to help my team and I stay on task and keep track of progress made on the project throughout the next two semesters.

This project will allow me to utilize my existing skills in web development to create something meaningful and useful. Not only will I be gaining applicable career experience, but I will be able to work on something that I can potentially use on a regular basis to help increase my own productivity. I personally struggle to find ways to stay motivated and productive throughout the day, and it will be neat to reflect on my own needs as a potential user as well as the needs of others. I also look forward to applying my co-op and course experience on a project of my own choosing. I'm also personally excited to develop something new, as my past experiences have

been making improvements to existing interfaces. It will be interesting to go through the full process of project development and implementation.

To go about implementing our ideas, I hope to begin with what I've been learning in my UI course and go about determining user needs before sketching many different possible ideas for our application. I expect that our team will begin brainstorming more ideas at our next meeting this upcoming Thursday. By the end of this project, I hope my team and I will have a working application to be proud of. I'm sure we will go through many iterations so I don't want to assume any specifics at this stage but I foresee us working well as a team and seeing the project through to the end. I will make sure to be at every meeting and keep up with any tasks or subtasks I take on during the duration of the project. Being done would mean that we have checked off all the items on our checklist. This list will be created as we continue working on the project. Finally, a job well done will look like a completed application that can be presented to and used by someone looking to improve productivity. I would also say that this means meeting deadlines, staying in contact with team members, and completing this project to the best of our ability.