By: Nicholas Bryant Individual Capstone Assessment

This senior design project is about adapting a physical concept into a digital one. I want to create a digital product that is satisfying to people used to a physical one, and reach new people with a good design. I believe it will allow me to apply many of the skills I've learned throughout my college experience. It's also the perfect chance to get feedback on my work. Creating something new from scratch that no one asked for means that I get to know what others think of my work, whether or not I can impress people. Ultimately this is a project to put my new knowledge to work and gain experience using the things I've learned.

For the project I will need to apply many of the techniques I learned from my classes. Software Engineering course taught me how to work on a schedule with a team and how to design a project. Software Engineering is also where I learned how to use GitHub, which will be used extensively in this project. Another key class is User Interface, which taught me how to design interfaces that people like as well as the importance of interviewing people to determine what they like. Of course I also need the coding skills I've developed over many classes, learning how to write different programming languages and the many different algorithms that can be applied within them. I've refined many of these skills over the past few years, and no experience was more impactful than my co-op.

I did all of my co-op rotations with Nestle, as an Engineering and Automation co-op. I learned and used several new software applications, from interface design to file storage. I discovered how important it is for a software to be easy to pick up when implementing it, as I saw the pushback that came from people used to an older software when you tried to push a new one. I now know how to work with your audience to make sure what you are creating suits their needs. I also found new ways to apply design to solve problems, and know there is always multiple ways to solve a tricky problem, sometimes you just need a new angle. I'm excited to use these learning to develop a new piece of software because I feel that everything I've learned will directly apply to this project.

It feels like everything I've learned can be clearly applied to this project, from the software development side and the working with people side. I want to try and do something that has depth, many of my projects before this were small in scale. I want to see the difference that come about working on something with more to it over the course of a year. I love to experience new things, and I see this as an opportunity to experience a lot. After all I need to discover what other people want, what they like and don't like, and how to transform that into a design they'll love. I'm filled with anticipation at other people experiencing something I've created as well

I expect this project to be more than functional, it should be memorable. I want to create something that leaves a lasting impression on people, and plan to do that with clear design and good writing. This project is the perfect way to achieve that, and that's why I'm so behind this project. If I create something that is merely functional, it works but is bland and simple, with minimal effort, I'll be dissatisfied with my work. I'll be done with the project when it not only works but works excellently, and I can enjoy using it. The way I'll accomplish this is by interviewing other people to determine a direction, and creating a basic design to give me something to work off of. Once the basic elements are created I'll be able to envision what the final design of the project looks like and can create an effective plan from there.