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<div align="center">Capstone Assessment</div>

For my senior design project, I decided to start a project I have wanted to do for a long time. I plan to make a full-stack personal portfolio website, most likely with a backend in C++ and a front end in C#. I feel that this would be a good project to test out and apply everything I have learned throughout my academic career. As well as give me a good project to show off my past projects, work experience, and skills to possible future employers. I'm planning on making it an in-depth website to accurately show employers my quality of work. I feel the project would also be a good talking point in interviews and something that could give me an advantage over other possible candidates.

I took a variety of classes during my time at UC that taught me both technical and non-technical skills necessary to complete my senior design project. Some of these classes are ENED 1100 and 1120, Software Engineering (EECE 3039C), Python Programming (CS2023), and Data Structures (CS2028C). ENED gave me the skills needed to efficiently and effectively work on a long-term project, both with others and on my own; as well as taught me the foundation of many programming languages I use regularly today, and will be using in this project. Software Engineering gave me the insight needed into the software development cycle, using version control effectively, and creating meaningful GitHub repos. Python programming gave me an in-depth look into one of the most popular programming languages; I will most likely be using Python to code the back end of my project, and the skills I learned in this class

will be directly applied. Lastly, Data Structures was the foundation for many more complex programs I have written since then, and has allowed me to become much more deliberate and efficient in my programs, which will surely come in hand during the development of this project.

My Co-Ops were also a large part of my growth at UC. My first two rotations were at Bosch as a MES (Manufacturing Execution Systems) engineer. My next two were at the Cincinnati Reds, working as a game-day systems expert. For my last Co-op, I went to Fives as a software developer. I believe the experience I gained at Fives will be the most impactful experience for my project. The work I did in C#, C, and C++ will be foundational to my work, as well as the experience I gained using version controllers in a real world scenario. Working as a game-day expert taught me the non-technical skills I needed to succeed in a real world space, giving me the communication skills and time management skills needed to complete this project. Lastly, Bosch gave me the Python and Database skills, which will come in handy for this project; I have not fully decided if a database will be needed, but knowing I could use one helps me keep my options open. All in all, co-ops have been a foundational part of my learning experience.

I am very excited and motivated to work on this capstone project. I have wanted to do this project for a long time, and I think I have all the skills and knowledge I need to make a nice portfolio website. With how spaced out and the amount of time I have to complete this project, I believe I will stay much more motivated to put lots of time and hard work into it instead of a rushed, small project. To self-evaluate myself through the project, I'm going to make a list of goals for myself and for how I want the website to look. As long as I'm meeting those goals and I'm proud of how the final product looks, I believe employers will also believe it looks good. I will also have my advisor look at my website as im making it to see if I need any changes as I

go. I will also have my co-op advisor check out my website before im finished to get her input and see if theres anything I should change or add that employers would want to see.

My current preliminary approach is to write the front end in C# and the back end in C++ or Python. I still need to do some research on the best choice for programming languages. I will also be looking at some other portfolio website to get some inspiration of what I want my website to look like. Again, I will also be talking to my advisor for some advice during this process to make sure I have a strong foundation. My approach could change as I work through the preliminary stages of the project, I could also come up with some new ideas as I go.All in all, im very excited and ready to get working on this capstone project and feel I have the skills and knowklage necessary to be successful.