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Senior Design

Capstone Self-Assessment

To me, the Bearcat Pantry senior design project is all about utilizing the knowledge I have gained here at UC, and to give back to the local community through this project. From an academic perspective, I hope to further my technical knowledge through implementation, but also the project management side of the senior design project. The Bearcat Pantry will require a website, an app, and potentially there could even be further expansion. Also, working with the senior design team as well as the Bearcat Pantry board will be beneficial for project management and the non-coding side of the project. As this is a real world project that will likely see future use after our time here, this is a fantastic opportunity for me to up my game, and write high quality production level code. I see the Bearcat Pantry as a fantastic opportunity as a Computer Science student and look forward to the months to come.

At the University of Cincinnati, I have had the opportunity to learn both in the classroom, but also in the “real world” during co-op. A few of my classes here on campus will be vital to my work on the Bearcat Pantry. The Software Engineering (EECE 3093) class will help immensely. In this class, we learned about the overarching design and implementation of a software engineering project. We also learned about the different forms of software engineering. Splitting up the work, and understanding how the different parts of the software work will be essential for the Bearcat Pantry. Our advisor, Nan Niu, was also our professor for Software Engineering. This already established relationship will make communication and expectations better. The other class that will help the project is Tech/Sci Writing (Engl 4092). Communication is above all else in software design. Also, we will most likely be leaving this project behind to another individual after the team graduates. They need to clearly understand the

various aspects of the application. End users are also going to need to clearly understand the use of the application. This can be accomplished with our technical writing abilities.

My knowledge gained on my five co-op rotations at Siemens PLM Software will also play a large role in the project. I have been a front-end web developer for all of my co-op rotations, and this project is essentially my job description. I hope to utilize the technical skills such as Angular, JS, HTML, CSS, AWS, testing frameworks, and more for the Bearcat Pantry. At Siemens, we also utilized many of the concepts we learned in Software Engineering. Seeing this in practice, and understand how a lot of the process works will greatly help our teamwork on the Bearcat Pantry. I hope to bring a lot to the table with the extensive knowledge I have gained in the classroom, and on co-op.

I am extremely excited to work on this project. For starters, this project will greatly help out those within the University of Cincinnati community. Nothing feels better than helping out those in need. Now that I am a 5th year student, it is my job to step up as a leader on campus and give back. While I was working at Siemens, it has been hard at times to stay motivated as I am building “their” software. What I mean by that is, when I will be working on the Bearcat Pantry, it will be a lot more personal of a project as we are building it from the ground up. Also, I do not want to let the many students who use the pantry down.

For our preliminary approach, we first need to clearly understand our requirements. We have heard this may be an app and a website, but nothing has been confirmed. So first things first, clear requirements need to be set with the board. If an app and a website are required, we will also require a database to store all the pantry’s information as well. Depending on implementation time and requirements, this may change. Evaluating contributions may be difficult. Hopefully, we are able to design the project in its entirety and then split up the implementation based on our strengths. Then, the board, our advisor, and professor will be able to evaluate the different aspects of the project.