Individual Capstone Assessment

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For our senior design project, we are going to design a web application that will have the capability to perform real-time audio and video backup. This means our application will utilize a camera and microphone. This application will be empowered through the Google Drive API allowing the users to sign-in through their google account and send their recorded files to the Drive once they are finished. This project will involve mostly PHP, HTML, and CSS, and may also utilize a database to store user information. Users will be authenticated through OAuth2.0 authorization. I think overall this project will provide a great opportunity for us to create something using our combined skillset.

My experiences throughout the curriculum here at UC will certainly assist my team and I on completing this project successfully. One class in particular that comes to mind is Software Engineering (EECE3093C). This class gave us the opportunity to work in student-lead groups that emulated real-world scrum teams. During this class we learned about and worked on designing various documents and plans related to our group project, such as requirements analysis, UML modeling, and testing plans. All of these things can now be applied to our senior design project to help us be more organized.

Not only does my experience in the classroom help prepare me for our senior design project, my time spent on coop will significantly help as well. For my most recent coop, I was working with a lot of API development as well as OAuth2.0 Authorization for those APIs. This work was done almost entirely in PHP, which was a new language to me at the time. I also gained a lot of experience working with relational databases. Above all else, I gained valuable experience working within a team environment, which will help me greatly as time moves on. All of these skills will help me in working on our senior design project.

This project excites me because I will be able to use a lot of the skills I learned from my most recent coop experience. For me, the work I found most satisfying so far in my computer science career was that of my most recent coop, so being able to implement the skills I learned there to my senior design project is something I am looking forward to. I am also excited because this will be a great project to add to our resumes when everything is said and done. For our approach to designing a solution, I believe my group and I are going to start by researching the areas of the project that we are unsure on. Then, from that research we will for diagrams and flowcharts that will lay out how our application will function. From these drawings, we will then break down individual components and from tasks for members of our group.

Overall, I expected our group to have a well working final product. I fully expect there to be some hiccups along the way, but I don’t think we will let anything deter us from finishing. I think that each member in our group has a different skill set which will allow them to work efficiently on certain aspects of our project. In terms of self-evaluating our contributions, we should all be able to present working pieces of our overall application. We will know when we are done when we can take those pieces and put them together and have the entire application run smoothly. On top of that, the application itself should feel and look nice.