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Individual Capstone Assignment

For our senior project we decided we wanted to create an application that helps people accomplish something. After thinking for a while, we came with an idea for an application that helps people choose things. The idea originally started as an idea for an application that helps groups of people pick a movie to watch for those moment when people can’t decide on what to watch. However, we decided to expand that, and it will now help people decide on things based on categories. It could be movies, TV shows, restaurants and more. This project will encompass front end and back-end skills and some of the algorithms I have learned throughout the semesters at UC. Overall, I think a project like this is a great way to summarize and to display everything that I have learned at my time at UC.

The first skills that I am going to utilize with this project are the skills I learned in my software engineering course. Everything that deals with the planning out for this project and the scope of the project I used my knowledge from that class. The project will also entail back end and front-end work. The knowledge from my classes that dealt with Python, C++, and SQL, (Data Bases, Intro to Computer Science and Python) will be used in the back-end work when dealing with user information and any function that needs to be done in the back-end portion of the project. At the same time some of the algorithms I have learned throughout my time at UC might help with handling user information when dealing with functions such as recommendations. On top of that a lot of the skills I picked up from Data Structures will be utilized when dealing with the back-end work. Overall, these are some of the skills that I have picked up through my academic years that will be used throughout the course of this project.

As for my co-op experience that’s relevant to this project, my co-op career started with me working in QA type of roles. When it comes to this project, a lot of the functions of the applications will need to be tested and we will have to make sure we fulfill our requirements. My time at ITI started with me testing software to see if fixes by the dev team worked and to find any new issues within the software. On top of that I oversaw our nightly testing framework for the software that had tests for the software running on virtual machines with different OS setups and different CAD systems. So, I think some of my experience in the QA field will help to make sure things are working properly on the application. At the same time, my semester at ITI I worked in a developer role where I got to work on the software I tested beforehand in my previous position. Here I learned about back-end work with C++ and Python. My last semester of co-op was at Siemens in a research development position, where I got to work with AR technologies and some TensorFlow models. This position taught me how to pick up new technologies quicker, which in this project will be a useful skill. Overall, this is how my co-op experience will be relevant to this project.

I am excited to work on this project. I am excited to see an application to be built from scratch and get to experience the whole process. At the same time, I am excited to work with my team to accomplish a goal we share. Another motivator for me in this project is getting to work with new technologies I haven’t gotten to use before such as APIs or some front-end work. I think this project is a good way to put all of my skills together that I have picked up and use them for something. At the same time this a good way to simulate what it’s like to put together a team and how to form your own project, like you would in the workplace and get to see it through.

Our approach to designing this project was to come up with a problem we wanted to solve first, as we knew we wanted to make some sort of application or website. After that we came up with the idea of our application called “Chooser” for now, that will help groups of people to decide on things. From here we are designing all the functions this app will look and how things should interact with one another. My expected results and accomplishments for this project is to at least have a functioning application that can at least perform the main function it was designed to do. I am hoping to expand the application as much as possible, further than just having a solid build of the application. We will evaluate our contributions by looking at what needs to be added to the application and seeing what we have been able to implement. We will know when we are done when the final application has a solid build with at least the critical function of the application working.