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Senior Design: Individual Assessment

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Part A

Over the course of the two semesters, my contributions to this project were mainly to the database code development and the presentation of our work. I developed the database code using SQL queries inside of a Python handler. Since the application API was being built in Python, it made the most sense to use Python’s SQL library to connect the API to the database. While developing the code, I learned many standard practices for developing this type of code, such as putting each database table into a class object, and then putting all of table classes into a database super class. This was an approach I had not taken when I was responsible to develop a database while on my first co-op, so it was very beneficial to get a better idea on how to properly create this kind of code in the future.

In addition to the database code, I took the lead role in creating the video presentations for our team and creating the poster display for the design expo. Having had prior experience with video editing from a personal project, I was able to apply my skills to edit our videos and greatly raise their quality, such as adding zoom-ins on certain features during the application demonstration and balancing the audio levels of all the audio in the video. As for the expo poster, I was able to utilize my skills from putting together weekly PowerPoint presentations from my co-ops to create a visually appealing and informative poster of our project. It was difficult to convey all the necessary information in the limited space, but I was able to manage after a number of repositioning of segments and rewording of sections. I firmly believe that without the careful editing I did for our deliverables, our project would not stand out nearly as much.

Part B

My group managed to accomplish a lot over the course of the last two semesters. After starting with barely an idea for a project, we ended up with a functioning financial forecaster that can store user profiles in a safe and secure manner. The app integrates self-learning AI to improve on its predictions and takes in IEX Financing data daily to display up-to-date results. Overall, I would call the project a success. Working with a group did not show to be terribly difficult considering all the members on this team lived together. Even though COVID-19 caused some of us to be outside of Cincinnati for a while, including myself, our communications over email and text messaging proved to be sufficient in communication what needed to be done and when.

Group work is something I tend to avoid due to typically being paired with group mates that do not do their fair share of work, but that is something that I did not experience at all during this senior design project. Every member of the team put in copious amounts of work and consulted each other if they needed help with a task. Everyone was able to learn something from everyone on the team. Nobody on the team had to be told to contribute as everyone took the initiative to make more progress. I would say all 3 of my teammates deserve recognition for making this group the best I have had to pleasure of working with. If the opportunity would arise for all of us to work on another project together, it would be a group I would be happy to be apart of.