Self Assessment

Part A:

For my group's project, I was mostly responsible for designing the front-facing, user-interface of the application. This involved working in the React framework in HTML, CSS, and JavaScript. In my opinion, I believe I did apply what I learned and discussed in my initial assessment in the Fall. Mainly, it was enjoyable to apply Software Engineering principles in managing and developing a whole application, Data Structures in managing how data is displayed in the frontend, and Programming Languages in trying to get an application with multiple parts with different programming languages to communicate with each other. Along with my academic studies, I also applied work experience in developing our project application. Mainly, I had worked in the Angular frontend framework, which uses SCSS, and TypeScript. However, it also has a component-based developing style like React. Because of these similarities, I was able to develop the user interfaces of the application with relatively fewer problems with organization and syntax than if I did not have that experience.

In terms of what I learned over the course of this project, I discovered how three large parts of an application come together in order to create a user experience. Not only did I work in the frontend, but my partner, Rey, showed me the different frameworks and libraries that enable the frontend to communicate with the backend, which was in Python, which then connects to the SQL database, where the data is stored. There was a general flow that I oversaw, that started from the user clicking a button in the application, the backend queueing for information from the database, and then lastly the database sending that information back up the chain so the user could view and edit it. Our successes mainly involved being able to debug problems that we had and pinpointing where or why they occurred. But those bugs were our obstacles as well. Although we were able to successfully tie together a working application, we found early on that not only should an application be functional, but it should also be easily navigable so that it can be troubleshooted without causing more problems down the line.

Part B:

Overall, my partner and I were able to create a working application that we could personally use for ourselves, which I thought was the ultimate success. Presenting what we had for the CEAS EXPO inspired us to personally keep developing it even after its time in the spotlight is over. We believe that this project has immense potential to help not only us, but other people as well. We had created what we'd like to call a minimum viable product, which is functional from end-to-end, but could use some more polishing and work.

In regards to group work, I learned that communication is essential, especially if different members are responsible for completely separate working parts from your own. From this, I feel that my partner and I learned that synergy is important for a large scale application or project. Even though we might individually get stuck, what's important is that they all work well together. As for what went well about teamwork, my partner and I were lucky to have an immediate form of communication, mainly discord and the fact that we live very near each other. Despite having very differing schedules, we were always at arms reach or a message away from a quick response. Some things that didn't go well were deciding which parts of the data processing to put in the frontend, backend, or the database. We were both confident in our abilities to perform certain tasks in our specialties, but we did not have the knowledge to understand where to put some of our logic to make processing or use easier for the user. I'd like to think that I am a humble person so I believe that I did not do as much work as my partner did. However, she always kept reminding me that each other's work will feel like a lot more than our own, simply because we are not familiar with it. So in reality, I was constantly reminded that I was also doing a significant amount of work. Personally, I would defer recognition to my partner, who wrote the logic for processing all of the data in the backend and also did most of the work on the database.