

Overall, I am very satisfied with the work I was able to achieve over the course of this project, despite the many challenges that emerged along the way. One of the largest skills I was able to build upon was perseverance when faced with unknown issues, and learning how to restructure a project so that I was still able to accomplish many of the goals I set out to complete. With the delay of major components needed to build the physical prototype, I decided that it would make more sense to begin working on a simulation that emulated the sensors. This was challenging, since it required thorough reading of the documentation for a product that I did not design, and it had to be done correctly since I didn't have the means of testing it directly. This taught me the importance of good documentation, as well as the importance of selecting technologies that are well documented when designing a project that uses said technologies.

I believe that this restructuring was successful, as it allowed me to implement and develop most of the software functionality that I originally had included in my milestones. Furthermore, I was able to learn about cross-application interactions, which was not my original expectation. As for other obstacles along the way, building the simulation programs took far longer than I originally expected, which really delayed my original deadlines. The environment in which the programs needed to run in turned out to be very complicated, and I had to learn more about file systems and access permissions on a modern day operating system.

While my project was done as a team of one, I still learned many things about working on projects that extend over a long period of time. One of the key takeaways was the importance on identifying when a task is complete, and knowing when its time to consider a feature good enough to move on. Many times during this project I was not satisfied with how complete a feature or task was but, as a solo member, I knew that I needed to move on and re-visit it at a later date. This was challenging as I wanted to make everything perfect, but I knew that I had to manage my time effectively to achieve my goals.

One aspect of being a team of one that did not go as well as I wanted was the burnout that can occur when working on the same section of software from start to finish. Many times, I found that I needed to take a break from certain areas of the project so that I could mentally reset and come back to a problem with a fresh view. However, since my project's milestones were so linear, this was not always possible. In retrospect, I think that I could have structured this project a bit more effectively, allowing for more areas to be worked on in parallel if I needed a break from a particular section.