James Campbell

Professor Annexstein

CS5002

April 17th, 2023

James' Individual Capstone Assessment

Part A:

My individual contribution to this project varied for both semesters that this project has been ongoing. For the fall semester, I spent more of my time researching sensors that would be a good fit for our project and discussing with the team which sensors would be optimal. During the second semester, my focus was on finding a way to protect our sensors from the weather conditions while making sure that our sensors would be able to provide accurate readings as well. There were a few obstacles that stood in the way of completing this task such as the cost of materials, but we found a cheap and reliable solution to the problem.

There were 3 main sensors that I needed to protect: The humidity/temperature sensor, the rain sensor, and the light sensor. Each of these sensors needed varying access to the environment while also providing enough protection for the sensors themselves. The easiest and cheapest way to accomplish this was by using plastic Tupperware for the housing of the sensors and hot glue to secure the sensors in place. I made sure to secure them at the top of the container so water or dirt that accumulated in the Tupperware didn't have an impact on the sensors.