Baltazar Guerra

Week of 3/30/2020

Overall Notes

- I did multiple tests for the Ultrasonic Sensors using my Arduino UNO. I tested it at first by holding it in front of my monitor, looking at the distance reading, then changing the distance and looking how the output changed. It turns out that it works really well at a distance of under 5 ft. Anything above that distance, it has a small variance of around 10%, which doesn't really affect our scope.
- The sensors still detect the distance quite well when used on a scenario mimicking a cane, but it is susceptible to some variance. I will be working on making a system of having the vibrating motors go off when the sensors detect a short distance, which is how the cane will react when approaching an obstacle.
- I wasn't able to obtain the TAMU App API, so we will go ahead and use the Google Maps API.
- Shawn has been great at working on the App. He's got most of the things required for the outdoor navigation. Mainly what remains is ensuring that the Pi and the App can communicate.
- We're still staying versatile on what our course of action will be depending on how "slowed down" we get.
- After I finish my tests of having multiple components together, I will pass it along those who were originally in the Hardware group and they will merge things together to build a rough prototype so we can start debugging and fixing it.