Team Name: sddec21-09
Team Members: Ryan Lanciloti, Ben Pierre, Chinar Kaul, Alyssa Marshall, Jared Hermon, Abdelaziz Hassan
Report Period: March 15 - March 29

Summary of Progress in this Period

We have updated the design document and completed the testing section. We have established unit testing, our interface testing, and acceptance testing. We ordered more ESP32s to begin unit testing for our team. We have established communication between the ESP32s and been able to collect CSI data.

Pending Issues

We have some confusion as to how we wish to proceed with forwarding data to be looked into. Additionally the ESP32 team has some confusion as to how to interpret CSI data that will be looked into.

Plans for Upcoming Reporting Period

We are potentially going to collect RSSI data and train a naive machine learning model. In future weeks, we will add CSI to improve upon the accuracy of the model. The antenna team will continue to theorize and explore options to maximize the CSI readings for the esp32 team. Once the ordered esp32 are received, the door team will begin testing our ideas. A second group will be working to change our esp32 logic to read CSI amplitude and phase instead of RSSI data. Additionally the esp32 team will be setting up a raspberry pi as a forwarding server to eliminate the need for a personal computer.