

Summary

This past reporting period we received our project. We will be working on “Magic Door Sensors.” The rough idea is that the sensors will be wireless and batteryless. In the time since we were told what we were doing and who our group members were, we have spent some time setting up general team management tasks. The project has been in the brainstorming stage for the past couple weeks as we research different available technologies and the feasibility of using them.

Individual Contributions

We were not aware that we needed to keep track of hours applied to the project per person, but we each did at least the minimum of 6 hours a week. We will just list each of us as putting 6 hours a week towards the project for this first reporting period.

Mitchell Bratina [12 hours]: Researched Channel State Information, researched power via ambient RF collection, and researched power needed to transmit data.

Calvin Christensen [12 hours]: Researched Channel State Information, began developing metrics for the project’s end results, and researched power via ambient RF collection.

Isaiah Exley-Schuman [12 Hours]: Researched Channel State Information, researched power via ambient RF collection, and researched power needed to transmit data.

Collin Kauth-Fisher [12 Hours]: Researched Channel State Information, started preliminary testing with Channel State Information using an ESP32, and read into backscatter Wi-Fi technologies.

Joseph Kueny [12 Hours]: Researched Channel State Information, researched backscatter Wi-Fi technology, set up team communication, and scheduled meeting times.

Pending Issues

Other than needing to decide on a technology, or blend of technologies, to use, there are no pending issues.

Plans

These are in no particular order.

- Quantify end product from the project.
- Solidify choice of technologies to use.
 - Research into the selected technologies more.
- Assign team roles.
- Everyone will start their role's duties.
 - Creating Git Issues.
 - Assigning Git Issues.
 - Create weekly reports for our advisor meeting.
 - Work on the team website.
- Do the assignment "Lightening Talk #1 (L1)"
- Log individual member work as needed.