sdmay19-21: Distributed mesh network for data collection and predictive analytics

Week 1 Report September 5 - September 12

Team Members

Ryker Tharp — Meeting Scribe Collin Vincent — System Engineer Colton Smith — Project Manager Gabe Tenold — Engagement Lead Cody Lakin — General Software Development Will Paul — Lead Architect

Summary of Progress this Report

Met and discussed with the client the general idea of the project. Talked about the scope and purpose of the project, and who the target users were. Discussed various technologies that could be utilized in the project, which led to our team researching and evaluating the pros and cons for each of the potential tools.

Pending Issues

Need to have a rough plan for the client to evaluate. Need hardware plans to fully evaluate the other tools efficacy.

Plans for Upcoming Reporting Period

Have an outline of an architecture for the project. Have a list of pros and cons for the various technologies that will be used to address the project's requirements. Continue researching wireless network types and begin building POC's for the client.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Ryker Tharp	Recorded meeting notes for the first three meetings (2 with Advisor, 1 with Client and Advisor) Discussed potential solutions to data storage on the network.) Scheduled and communicated meetings to those involved.	4	4
Collin Vincent	Discussed potential solutions to the networking protocols and data storage problems. Additionally, began research on various existing technologies for solving this design concerns (rqlite).	4	4
Colton Smith	Helped to organize the team's efforts towards research and researched potential data transfer and communication protocols	4	4

	(primarily Zigbee).		
Gage Tenold	Initiated discussions of potential problems with the project with the Client. Also started looking into the existing solution at Danfoss for help starting our solution.	4	4
Cody Lakin	Assisted with decisions regarding the programming languages and tools that will be utilized in the project, taking into consideration the experience of the other team members.	4	4
Will Paul	Began discussing/researching designs with the team for how to structure the network from a software perspective.	4	4

Gitlab Activity Summary Nothing to report as of yet.