

Weekly Status Report 5

Dates: 2/25/2018 - 3/10/2018

Group Number: sddec18-02

Project Title: Steam Heat Controller Retrofit

Client/Advisor: Lee Harker

Team Members - Role

Sarah Coffey - Reporting Lead

Ken Wendt - Webmaster

Liz Wickham-Kolstad - Design Lead

Jevay Aggarwal - Technical Lead

Joe Filbert - Client Lead

Thomas Devens - Planning Lead

Summary

We have identified several issues with our current design and are working to find fixes. This includes our choice of communication protocol for the thermostat and some limitations in the manufacturing of the motor mount. Our research has also included how to drive the motor with the Raspberry Pi. We began looking for alternatives and identifying the core requirements of the project that must be met with each part of the system through these redesign efforts.

Pending Issues

Determine the protocol for communication between the thermostat and valve controller.

Going Forward

Sarah, Liz, Jevay, and Thomas: Finish researching the thermostat microcontroller and give Joe the parts list for the thermostat. Continue temperature data collection.

Joe and Ken: Finalize the motor mount redesign with Lee and give Lee the design to be manufactured. Continue research on driving the motor with the Raspberry Pi.

Individual Contributions

Name	Contribution	Hours Worked	Total Hours
Sarah	Helped the hardware team research Raspberry Pi motor drivers. Identified alternatives for the thermostat microcontrollers.	7.5	37.5
Ken	Assisted in the redesign of the motor mount for manufacturing.	5	34.5

