

Bi-Weekly Status Report 6

Dates: 11/4/2018 - 11/17/2018

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

During the last two weeks, our team has made progress for hardware, software, and the website. For hardware, our time finalized and ordered the remaining PCBs. We also discovered that the heat sink used on the RCU would not lower the temperature enough, so a different solution was made. For software, the team continued to try implementing the security measures. We realized that simply encrypting the connection between the RCU and MCU would not suffice, and we would need to implement key sharing. The team also continued to attempt the integration with LDAP and connecting to the database using SSL. The functionality of the website was also mostly completed during this time period.

Pending Issues

The team is still working on getting the packaging for the RCU and MCU. The various security measures also need to be completed. The team is also planning ahead to begin work on the updated design document, poster, and final presentation.

Going Forward

Individual Contributions

Name	Contribution	Hours Worked	Total Hours
Sarah	Worked on fixing the connection to LDAP and the database via SSL, as well as the encryption/key sharing between the RCU and MCU. Also started coming up with the way to do error reporting via the web server.	19	68
Ken	Made progress soldering and testing the MCU PCB. Found issues with the MCU getting too hot and found parts to fix this issue.	9	53

Liz	Adding documentation to code, working on security updates for database and RCU - MCU communication	4	
Jevay	Worked on the AES encryption for the raspberry pi. Communicated with the library guy to check for updates	4	49
Joe	Worked to correct heat issue with MCU. Working on 3D model of MCU enclosure. Parts orders for coupling and RCU.	5	41
Thomas	Implemented error resolution on the WCU Worked on SSL connection from WCU to DB Continued work on LDAP authentication for WCU	8	54.5

Meeting with Client/Advisor

Not applicable.