CS 4910 – Software System Development and Design II: Implementation and Testing
Project Progress Report

Project Information:

Team Members:
Anthony Kirkland
Macallister Armstrong
Lorand Mezei
Jeremy Evans

Client:
Allin Kahrl, Department of Engineering Design, Manufacturing and Management Systems

Advisor:
Mr. Colin MacCreery

Report Date:
04/02/2021

Team Activity Report:

What has your team done since your last report. Indicate team meetings with a brief description of what was discussed, and a breakdown of any other activities your team engaged in since your last report.

We made significant progress on both the UI and the PID algorithm. We now have a working UI that creates a struct with all the inputs from the wish list. We also have a foundational PID document which lays out our derivation of the theory being used for our PID implementation. We have one test bed of four, but Allin has asked us not to use it until we have discussed it. We are waiting on the remaining three test beds.

Client Interaction Report:

Have you met with your client since your last report? What was discussed? What feedback did you client give you on your progress? Did you demonstrate a prototype?

We have met with Allin once in the past several weeks. We discussed what might happen if we are not able to ascertain our test beds. Allin assured as that if we have either a working UI or a fleshed out PID algorithm, this would be sufficient given the very short time frame we will have with our test beds.

Milestone Review:

Briefly describe the phase of your project that you are currently working on. What is the planned date of completion for this part of your project? Are you ahead of schedule, on schedule, or behind schedule?

We are currently working on several things. We are adding validation to the UI, writing a proof of concept for writing to flash, and performing unit testing on the PID algorithm. We are attempting a two-pronged approach (UI and PID with test inputs). When we have the test beds we will attempt to connect the two. We feel that we can still finish, but we are behind schedule.

Issues (or stories):

What issues are you currently working on? These are smaller tasks that are part of accomplishing your current milestone. They are also referred to as stories.

We are working on adding UI validation, testing writing to flash, and unit testing the PID algortihm.

Problems and Risks:

What problems have arisen, if any? How do you plan to address these problems and stay on schedule? Do you foresee any risks that may impact your project? If so, what are they and how do you plan to mitigate them?

The main problem we face is that we are not able to use our test beds yet, so the functionality of our PID algorithm is entirely untested and virtually untestable. Lorand is attempting creating tests to the algorithm in C without relying on the MSP430 or test beds.