

# 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:

TBD

### Report Date:

01/29/2021

## 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 individually set up development environments and confirmed that we can output code to the MSP430 (the microcontroller used for this project). We met once on January 24 to confirm that all of us would use the same means of outputting code to the MSP430 and to divide up tasks for the first sprint (which were expanded following a meeting with our client, Allin, on January 26; see “Client Interaction”).

## Client Interaction Report:

We met with our client, Allin Kahrl, on January 26 to discuss what we have so far (namely that we set up our development environment and intend to start working on the initial phase of the project: control the intensity of an LED connected to the MSP430 with a potentiometer. We agreed with Allin to split the project into three phases:

- Phase 1: Control LED intensity with potentiometer.
- Phase 2: Implement a PID system that will behave as expected under test conditions that Allin will provide (along with a UI to set parameters).

- Phase 3: An expansion of phase 2 that accounts for polarity reversal (to account for temperatures below the freezing point).

### **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 at the beginning stage of Phase 1 (which we set as a milestone) and plan on finishing it by February 6.

### **Issues (or stories):**

Our current issues consist of documenting the development environment and hardware used in this project, which may go into the final report (Macallister); documenting PID and its implementation in this project, which may also go into the final report (Jeremy); and pulling the code from the final assignment in CS 2230 for part of Phase 1 (all).

### **Problems and Risks:**

We have not encountered problems directly related to the project itself (yet), other than general unfamiliarity with the field (industrial control systems). We plan on addressing that issue by documenting PID and its implementation and completing Phase 1 of the project.