

**EE/CprE/SE 491 WEEKLY REPORT 9**

**4/3/2022 - 4/10/2022**

**Group number: SDDEC22-01**

**Project title: Plastic Machine Embedded IOT Controller**

**Client & Advisor: Mark Hansen & Dr. Jones**

**Team Members/Role:**

**Stone Widder - Technical Lead**

**Joshua Baringer - Software Lead**

**Rachel Teberg - Historian/Reporter**

**Evan Pasero - Project Manager**

**Charles Sang - Controls Lead**

○ **Weekly Summary**

This last week we met with our client and demoed our thermocouple circuit that Charles has been working on. We showed that we are able to read the current temp from the thermocouple and control the PIDs as needed. Rachel presented a wireframe for the GUI that she came up with and we received some feedback about things that we need to add, such as the time it takes for the plastic to melt as well as a button to have the automated machine run. Evan continued to work on the PCB design and it should be ready to order this coming week. Stone helped out all of the other team members with their tasks.

○ **Past week accomplishments**

- Tkinter familiarization - Josh and Rachel
- Thermocouple circuit troubleshooting - Charles and Stone
- PCB design - Evan

○ **Pending issues** *(If applicable: Were there any unexpected complications? Please elaborate.)*

- NA

○ **Individual contributions**

<b><u>NAME</u></b>	<b><u>Individual Contributions</u></b> <i>(Quick list of contributions. This should be short.)</i>	<b><u>Hours this week</u></b>	<b><u>HOURS cumulative</u></b>
Stone Widder	Working on interface between BBB and thermocouple circuit	3	49
Rachel Teberg	Finalized initial GUI designs, started researching tkinter for GUI Development	3	47
Joshua Baringer	Experimented with tkinter for GUI Development	3	44
Evan Pasero	Relay research	3	47
Charles Sang	Debugging thermocouple and shutdown circuit	2	48

○ **Plans for the upcoming week**

**Joshua:** Continue work on the GUI implementation

**Stone:** Thermocouple interface and continue research into soft shutdown

**Rachel:** Continue research and implementation of GUI

**Charles:** Continue debugging thermocouple to meet demo temp setting.

**Evan:** Relay research, begin B.O.M, attempt to finish rev 1. Of board by sunday.

○ **Summary of weekly advisor meeting**

In our weekly meeting with our advisor we talked about the plans for the upcoming work. A lot of us had exams last week so we didn't make a lot of progress towards our goals. Because of the lack of progress we didn't have much to talk about. We did a demo of what we have and discussed the next few weeks with Mr. Hansen. We also asked him some questions regarding the display and the current draw on the injection molder vs. the current draw on the test stand that we are working with.