

**sdmay19-47: NSF Lab furnace control system**

Week 8 Report

March 24th - April 2nd

**Team Members**Adam Matthews — *Software/Hardware Engineer, Report Manager*Kevin Lang — *Electrical Engineer*Jeremy Hartl — *Hardware Engineer*Christopher Pohlen — *Software Engineer/Gitlab Moderator*Nick Brylski — *Systems Engineer***Advisor/Client**

Dr. Gary Tuttle

**Summary of Progress this Report**

The timer thread now fully works with the GUI and allows full functionality. An interrupt timer was implemented on the Mega to get a refresh rate of about 5 seconds. Function were written to pull data off the OTC.

**Pending Issues**

The important thing to add to the GUI is a settings page which can be used to save a settings configuration for the next time the GUI is used. Data needs to be formatted for the display. This amounts to a lot of hard coding of pixel coordinates.

**Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Adam Matthews	<ul style="list-style-type: none"><li>No work</li></ul>	0	14
Kevin Lang	<ul style="list-style-type: none"><li>PCB schematic</li></ul>	3	24
Jeremy Hartl	<ul style="list-style-type: none"><li>GUI development<ul style="list-style-type: none"><li>Added adaptive limits and changed entry boxes so that the GUI can send errors when non-digit values are entered</li><li>Added functionality to set zones from other, already set zones</li></ul></li></ul>	6	31
Christopher Pohlen	<ul style="list-style-type: none"><li>Got timer threading to work correctly with the rest of the GUI, updated README</li></ul>	4	31

---

Nick Brylski	<ul style="list-style-type: none"><li>● Soldered PCB</li><li>● Hardware testing</li><li>● Embedded coding</li><li>● TFT display coding</li></ul>	6	30
--------------	--	---	----

**Gitlab Activity Summary**

Nothing to report.

---