

sdmay19-47: NSF Lab furnace control system

Week 6 Report

March 4th - March 13th

Team MembersAdam 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

There has been some initial development of the timed GUI update system. In addition, an added README will assist either future development and product release. PCB was reviewed and approved by our advisor.

Pending Issues

The timer blocks the rest of the GUI from operating. It will require some trial and error to get the threading working. PCB needs to be ordered from ETG.

Functionality for the profiles page must include a method to set all temperatures, slopes, and times at the same time per zone. There must also be a method to set the amount of steps per profile.

Individual Contributions

| Team Member | Contribution | Weekly Hours | Total Hours |
|--------------------|--|--------------|-------------|
| Adam Matthews | <ul style="list-style-type: none">• Create new function in API | 1 | 14 |
| Kevin Lang | <ul style="list-style-type: none">• PCB schematic | 3 | 18 |
| Jeremy Hartl | <ul style="list-style-type: none">• GUI development<ul style="list-style-type: none">○ Created profiles page and experimented with several different kinds of spreadsheet techniques | 5 | 19 |
| Christopher Pohlen | <ul style="list-style-type: none">• Added README and began working on an | 4 | 22 |

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|--------------|--|---|----|
| | automatic timed update system | | |
| Nick Brylski | <ul style="list-style-type: none">• PCB design• Arduino embedded coding | 3 | 21 |

Gitlab Activity Summary

Nothing to report.
