

**sddec20-02: Laptop Lending Status System**

Week 4 Report

March 2nd - March 15th

**Team Members**Zoe Sanders — *Software*Farouk Al Obaidi — *Software*Camden Thomas — *Hardware*John Wagner — *Hardware*Aaron Thune — *Hardware*Ryan Ray — *Software***Summary of Progress this Report**

These two weeks, the software team made huge advancements on their API communication module and Pi mapping module.

**Pending Issues**

- Pi Communication needs to be finished
- Needed hardware needs to be ordered

**Plans for Upcoming Reporting Period**

- Finishing Master to sub-pi communication module along with thorough documentation
- Start on team wiki on Gitlab
- Merge software modules

**Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Zoe Sanders	Worked on Master-to-Slave Pi communication. Finished Slave pi self-registration. Finined untested Master-to-slave LED update communication. Started creation of communication unit tests. Attended client and weekly team meetings. Worked on lightning talk 2.	9	18
Farouk Al Obaidi	<ul style="list-style-type: none"> <li>● Wrote code to find the status of items (equipment/laptops)</li> <li>● Researched Python Rest API frameworks for the clients Web application backend               <ul style="list-style-type: none"> <li>● Wrote Rest API code using Flask framework</li> </ul> </li> <li>● I attended our client meeting and the</li> </ul>	9	18

	<p>weekly team meeting.</p> <ul style="list-style-type: none"> <li>Worked on lighting talk 2</li> </ul>		
Camden Thomas	<p>Attended team and client meeting. Continued to work on web interface Worked on Lightning talk 2</p>	10	5
John Wagner	<p>Attended all team meetings and class sessions. Decided on a closing mechanism for the hanger casing. Looked into making patterns in AutoDesk Inventor. Drew out a prototype design for casing, with an isometric view.</p>	13	6.5
Aaron Thune	<p>Continued work on LED Driver hardware.</p>	10	5.5
Ryan Ray	<ul style="list-style-type: none"> <li>Database interaction/Led mapping module module (17.5 hours git log)</li> <li>Wrote code to interact with the database</li> <li>I created an api for registering pis, updating health checks, and getting the status of leds</li> <li>It will also tell the management code when an led changes because of a libcal update, an led being remapped, or a color being remapped</li> <li>I created a function that diffs the current state in the db with the new state from libcal</li> <li>I created a an api to get and update led mappings for the admin backend</li> <li>I also wrote unit tests for all of that code and an integration test (98% code coverage)</li> <li>Also I attended our client meeting and the weekly team meeting</li> <li>I also worked on and merged the lightning talk</li> <li>I handled communication between my group and our advisor</li> <li>I went to our weekly team meeting and our advisor meeting <ul style="list-style-type: none"> <li>I rebased the api key out of our repository</li> </ul> </li> </ul>	11	22

### Gitlab Activity Summary

Nothing to report.



