

## sddec20-02: Laptop Lending Status System

Week 1 Report

January 20 - February 2

### Team Members

Camden Thomas — *Software & Hardware*

Ryan Ray — *Software & Dev ops*

Zoe Sanders — *Software*

Farouk Al Obaidi — *Software*

John Wagner — *Hardware & Software*

Aaron Thune — *Hardware*

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### Summary of Progress this Report

Our team is currently in the Research and Planning phase of development. On January 23rd we had our first official team meeting. On Wednesday the following week (January 29th) we had our first meeting with our client to discuss requirements and gather necessary information.

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### Pending Issues

- Researching and agreeing on best Raspberry Pi option.
- Researching and choosing best options for LEDs that are connectable to Raspberry Pi and individually addressable.
- Figure out the best way to physically orient the Raspberry Pi's and LEDs for optimal clarity for each LED's association with each laptop or lendable hardware piece.
- Studying client's system API in order to properly interface with it once hardwares are chosen

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### Plans for Upcoming Reporting Period

- Our team plans to solidify one or more choices of Raspberry Pi
- Our team plans to solidify one or more choices of Raspberry Pi compatible LED systems that are individually addressable and portable.
- Our Software team hopes to gain access to the client's API documentation for the current laptop lending software in order to study it.
- Our Software team plans to study Python and practice using it for future usage with chosen Raspberry Pi.

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### Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Camden Thomas	I worked on gathering project requirements and relevant information from our clients. Once project requirements were gathered, I was assigned to do research regarding L.E.D.s that will be used as a status indicator for each unit to be tracked. I researched RGB LEDs and have started to look into what ones would be	5.5	5.5

	the best suited for our project. I plan to have a list of potential LED candidates before the next status report.		
Ryan Ray	I participated in the initial meeting with our client where we established their requirements. After that we had a meeting where we talked about what tools and technologies we would want to use and research. I have been looking into raspberry pi emulation, configuration management systems, and tools for packaging and distributing our applications to the Raspberry Pis. I will have a list of my recommendations before the next status report.	6.5	6.5
Zoe Sanders	Participated in team meeting (1-hour on January 23rd) and client-team meeting to gather requirements (1.5-hours January 29th). Began researching and teaching self Python as well as researching Raspberry Pi's and LED setups. (3 hours).	5.5	5.5
Farouk Al Obaidi	Participated in team meeting and client-team meeting to obtain an overview of the project. Additionally, I researched what Raspberry Pi is needed for the project based of the client's requirements. From the research it seems like the Raspberry Pi 3 Model A+ is the one needed for the project. Notes regarding the Raspberry Pi model will be discussed in the next team meeting.	5.5	5.5
John Wagner	I went to group meetings and participated in their project conversations. I looked into things like soldering, RaspberryPi I/O, LEDs, and circuit design.	6	6
Aaron Thune	Participated in team meeting and meeting with client to gather project requirements. Researched LED matrices, multiplexed RGB LED control with Raspberry Pi, and approaches to solving the problem of putting LEDs on the 'bagged items' in the library lending system.	5.5	5.5

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**Gitlab Activity Summary**

Nothing to report.

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