EE/CprE/SE 491 WEEKLY REPORT #4

Report Period: 9/28/2020 – 10/12/2020

Group number: 21

Project title:
Small Equipment Checkout System

Client &/Advisor: Leeland Harker

Website:

http://sddec20-21.sd.ece.iastate.edu/team.html

Email:

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Team Members/Role:

Samuel Sklar - Circuit Board Lead
Kailin Zheng - Hardware Design Lead
Seth Jones - Integration Engineer
Shubham Chauhan - Interface Lead
Michael Momot - Server/Database Engineer
Thomas Smith - Scrum Master/Architect/Developer

<u>- Sprint Summary</u>: We accomplished the completion of the PCB board design this week. This was the first iteration of this design, and may be updated if issues are discovered during the integration of this PCB board with the system. We also now have our server hosted on the VM. We have node, sql, and other needed things installed. At this point, we are looking to integrate it with the physical system once we get the PCB boards in.

- Past sprint accomplishments :

- ❖ Thomas Smith: Instructions for the product have been started. Coordinated meetings with the team along with the customer.
- Seth Jones : Practiced soldering in preparation for pcb and other hardware to arrive
- Micheal Momot: Getting backend deployed to server
- Shubham Chauhan: Worked on studying the software code to add the comments about the functionality of functions for future use.
- Kailin Zheng: Wait for other hardware parts, and understand PCB in all aspects, learn and refer to PCB welding knowledge and precautions
- ❖ Samuel Sklar : Designed PCB boards and sent to client

- Pending issues: These are our issues.

- Thomas Smith: No current blockers.
- Seth Jones: Still need a little more practice with soldering to ensure that the product's functionality is unhindered by assembly.
- ❖ Micheal Momot : working through issues with migrating the backend to RHEL8
- Shubham Chauhan: Need to work on the university ID feature not working properly on the website.
- ❖ Kailin Zheng :Because Lee's requirement for PCB needs to be ensured, accurate practice and correct welding technique are required to be within a certain specification.
- Samuel Sklar: Need to finalize what lock we are going to order. Boards ordered but lock is final piece.

- Individual contributions

Name	Individual Contributions	Hours this week	Hours cumulative
Thomas Smith	Writing of instructions along with overall coordination of meetings. Also poked around the backend code a bit	7	25
Seth Jones	Soldering tutorials and practice soldering	8	24
Micheal Momot	Deploying backend to server	6	23

Shubham Chauhan	Analyzed the backend code and tried to document the code functionality.	7	21
Kailin Zheng	Learn welding and ensure PCB size with Lee's requirement	6	22
Samuel Sklar	PCB board design and forwarding to client	8	31

- <u>- Comments and extended discussion</u>: At this point we are waiting for our PCB boards to come in from being ordered. In the meantime, we have had two team members practice their soldering with kits provided by the customer. The goal is that once they are in, we will be working to get them integrated with the actual product. Until then however, we will be blocked on progress when it comes to hardware.
- **Plans for the upcoming sprint**: Our future plans are to continue progress on the server, and prepare for when the PCB boards come in.
 - Thomas Smith: Assist Micheal, along with finish up instructions.
 - Seth Jones: Continue to practice soldering. Meet with Sam to discuss hardware before its arrival.
 - Micheal Momot :
 - Shubham Chauhan: Work with Tom to fix any possible/existing issues in the code.
 - Kailin Zheng: Meet with sam and seth to continue to explore the overall design and better ways to reduce the size of the PCB
 - Samuel Sklar: Will finalize parts list (lock) as well as ensuring working PCB design.
- <u>- Summary of weekly advisor meeting</u>: We talked with Lee about progress on the PCB boards. His main concern is whether or not the PCB boards will fit correctly into the allotted space on the doors. Once the boards come in, this will be a top priority for us.