

EE/CprE/SE 491 WEEKLY REPORT

Report Period:

9/15/2020 – 9/28/2020

Group number:

21

Project title:

Small Equipment Checkout System

Client &/Advisor:

Leeland Harker

Website:

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

Email:

sddec20-21@iastate.edu

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

- Sprint Summary : We met with our advisor and talked about expectations for this semester. With Covid changes in mind and our current situation, we are now expecting to build only 3 working lockers and a user's manual. We have delivered Lee a list of parts for our first door, and have designed the PCB. Our software focused members setup running environments on their local machines. We worked with the ETG to fix a VM certification issue.

- Past sprint accomplishments :

- ❖ Thomas Smith : Scheduled tag-up meeting with Client and team. Captured remaining work to be done for product into stories. Will update hardware related stories once feedback is received for PCB boards.
- ❖ Seth Jones : Gain understanding of hardware side of project in anticipation of getting physical components. Discussed functional requirements of PCB.
- ❖ Micheal Momot : Helped get people's dev environment setup. Worked with ETG to fix certification problem on VM. Setup production database on the VM.
- ❖ Shubham Chauhan : Attended team meeting with advisor. Setup the local database for the front end. Ran and tested the software code.
- ❖ Kailin Zheng : Helped and design Master Circuit of PCB, get the lock sample after communicating with client, and modify the size of PCB and improvement of on-board functions
- ❖ Samuel Sklar : Continued to work on PCB. Working with EasyEDA software to engineer and test a PCB board to specifications.

- Pending issues : Need to wait on parts that we are ordering to come in. Need to have members meet up to swap hardware. Need to setup CI/CD to our VM. Mock up a design for the user manual.

- ❖ Thomas Smith : Waiting on hearing back about hardware related PCB progress before planning any further.
- ❖ Seth Jones : Need to practice soldering including handling surface mounts.
- ❖ Micheal Momot :
- ❖ Shubham Chauhan : need to figure out the error behind the university id not accepting the id number on the website.
- ❖ Kailin Zheng : Still need to confirm the smooth work of all PCB parts, and need to find other modules with the same function but smaller into the PCB to make the size meet the customer's requirements
- ❖ Samuel Sklar : PCB requirements have changed a few times. I'm currently working on getting the board as small as possible.

- Individual contributions

Name	Individual Contributions	Hours this week	Hours cumulative
Thomas Smith	Scheduled/ran meetings, captured remaining effort in stories, started work on patching missing front end features.	7	18
Seth Jones	Gained understanding of hardware components in prep for arrival. Discussed functional requirements of the PCB.	6	16
Micheal Momot		8	17
Shubham Chauhan	worked on the developer environment to link it to local databases for testing software code.	6	14
Kailin Zheng	Confirm the Master Circuit and PCB design drawing, and retrieve the lock sample from the school. Check out the redesign of parts and parts of the PCB that need to be improved	6	16
Samuel Sklar	PCB related work and improvements	9	23

- Comments and extended discussion : Progress is coming along at a standard rate.

- Plans for the upcoming sprint : Our future plans are to setup CI/CD integration with git, comment/document the codebase, and start building physical devices.

- ❖ Thomas Smith : Plan another planning meeting, along with a separate meeting with Lee. Continue work on patching missing features in front end software of the product. Also write a user manual for the product.
- ❖ Seth Jones : Practice soldering including surface mounts. Meet with Kailin and Sam to avoid overlap in work.
- ❖ Micheal Momot : Continue migrating and testing our codebase on the VM.
- ❖ Shubham Chauhan : work with tom to help complete the manual.

- ❖ Kailin Zheng : Will start to study how to assemble the parts on the door, and start to finish the preliminary design of PCB, waiting for client feedback
- ❖ Samuel Sklar : Continue to revise and edit PCB. Need to get final design out to Lee ASAP. Current goal is to make board as small as possible within new advisor recommendations and requirements.

- Summary of weekly advisor meeting : Revisited our goals for the semester. We will now only be building 3 lockers and also creating a user manual. We were not planning on making a user manual, so we will need to come up with the design. We talked about where we were at with hardware and confirmed some things about the previous group with Lee.