sdmay19-13: Small Equipment Checkout System

Week 2 Report September 11 - September 17

Client & Advisor:

Leland Harker

Team Members

Yimin Wang — Hardware team (Chief Manager) Fengnan Yang — Hardware team (Hardware Reporter and Meeting Manager) Jiaxin Li — Hardware team (Treasurer) Caining Wang — Software team (Software Reporter) Bei Zhao — Software team (Secretary)

Summary of Progress this Report

During this week, we held a second meeting with our client. During the meeting, he showed us what the previous group did last year. Also, the client introduced more detail information about this project. At the end of the meeting, he shared the pending issue for the previous work. For the rest of this week, our hardware team mainly focused on reading the design documents of the previous team and we found there are some components that they use on the project is very new for us, such as the one-wire system, Raspberry Pi, and DS2406P. What's more, Hardware group did research on the website and tried to obtain a basic understanding of how those components work. As for software group, they read through the code documents inherited from the previous group and mainly focused on designing MVC with Java language and learned how to make the model interact with the viewer.

Pending Issues

- 1. Find the function of the level shifter.
- 2. Learn how to control on-wire register.
- 3. Learn how to use and control Raspberry Pi
- 4. Figure out why the previous group choosing DS2406P on their design project.
- 5. Learn MVC design for Java

Plans for Upcoming Reporting Period

- 1. Bei Zhao: Work on figuring out a way to compile the web application implemented by the previous team.
- 2. Caining Wang: Work on implementing the new desktop application.
- 3. Jiaxin Li, Yiming Wang: Analyze and test the PCB designed by the previous team. Keep learning the Multisim and Ultiboard.
- 4. Fengnan Yang: Set up the group meeting time and discuss pending issue with the client.

Team Member	Contribution	Weekly Hours	Total Hours
Fengnan Yang	 Took notes during the meeting with the client. Deep learned basic control about Raspberry Pi. Began to learn how to solder the circuit. Read design document from the previous Senior design group 	6	12
Jiaxin Li	 Read and analyzed the data sheet about component DS2406P. Tried to understand the connection between this device about the 1-WIRE system. Also, tried to understand how the Voltage Regulator work. 	6	12
Yimin Wang	 Did some researches on one-wire technology. Started learn raspberry pi OS. Analyzed level shifter for one-wire chips. 	6	12
Caining Wang	 Learned the MVC design for Android. Learned how to use an activity to start a model and interact with views. Learned how to use different layouts. Learned how to create an activity and bound it with a layout. 	6	12
Bei Zhao	 Attended the weekly group meeting and be more familiar with the progress of everyone in our team and the last team has already done. Started to learn the React and try to run the frontend code and checkout system code of the previous team. Worked on the team reflection assignment 2: Design Thinking Pre-workshop with other team members and write my portion of weekly status report 2. Learned how to write a project plan by reading the previous team's project plans. 	6.25	12.25