

*EE/CPRE/SE 492 WEEKLY Report 1*

*1/13/20 – 1/30/20*

*Group Number: 09*

*Project: Inventory Locator Assistant*

*Client/Advisor: Leland Harker*

*Team Members/Role:*

*Alejandro Buentello: Hardware Manager*

*Caleb Gehris: Communication Supervisor*

*Jacob Linch: Software Manager*

*Kurt Markham: Meeting Supervisor*

*Erin Power: Planning and Time Management Supervisor*

*Chris Rice: Database Manager*

## **Weekly Summary**

The past two weeks have been used largely to organize and plan the activities for the rest of the semester. A Trello board was made and all the relevant tasks have been added. Additionally, Mr. Harker was consulted to clarify some of the project requirements and what his ideal system would do. Currently, the team is in the process of moving our software from a raspberry pi that was used for prototyping to an ISU hosted server that will become the permanent host for the project.

## **Past Week Accomplishments**

- Alejandro Buentello
  - Finalized UDP string to parse into variables
  - Wrote test for every individual LED
  - Started working on a testing framework for individual coordinates
  - Debugging microprocessor code
- Caleb Gehris
  - Talked with Mr. Harker to finalize design requirements, and to see if any other requirements or functionalities are wanted
  - Communicated with Mr. Harker to get our team the datasheets we need to fill the database.

- Jacob Linch
  - Started working on voice to text api integration with the android application
- Kurt Markham
  - Took meeting notes
  - Updating UML diagram of devices
- Erin Power
  - Discussed need for Raspberry Pi.
  - Became acquainted with server.
- Chris Rice
  - Met with Mr. Harker to clarify requirements regarding system database and hosting.
  - Communicated with the ETG shop to get our team access to a permanent VM that we can use to host our project and that will continue hosting project after graduation.
  - Installed required technologies (mysql, python, flask, virtualenv, etc) on the server, transferred existing api code to server.

### Pending Issues

- Working on mapping number of drawers to corresponding LEDs (drawer #1 to LED 1-3 drawer #2 LEDs 3-6, etc)
- debugging errors reading UDP string
- Work on providing a test situation for LEDs.
- While there is currently a basic sql schema, we are still waiting on Mr. Harker to deliver remaining existing data artifacts for inventory of the ETG.

### Individual Contributions

Name	Hours Since Last Report	Cumulative Hours
Alejandro Buentello	4	70.5
Caleb Gehris	6	70
Jacob Linch	8	73
Kurt Markham	5	71
Erin Power	5.5	70
Chris Rice	8	72.5

### Plans for Upcoming Week

- Alejandro Buentello:
  - Try to finish mapping drawers to LEDs and finish up testing for coordinates
- Caleb Gehris:
  - Work on voice to text functionality for searching
  - Work on documentation for setting up and maintaining system

- Jacob Linch:
  - Continue to work on voice to text and integrate application with server
- Kurt Markham:
  - Create more indepth database schema
- Erin Power:
  - Create a test to turn all LEDs on and off.
  - Create a test to turn on specific LEDs.
- Chris Rice:
  - Finish Transferring existing code from Pi to server.
  - Finish designing database schema (contingent upon getting all available files from Mr. Harker)
  - Adapt current API application to use mySQL instead of current implementation using sqlite.

### **Summary of Weekly Advisor Meeting**

1. Voice assistant - Approval for the search to be a list rather than just voice with the top three list items being lit up with different colors
2. Cloud Database - Start a hosted database from the university and migrate the PI code to server
3. LED Testing - Light up all of the LED's for visual test
4. Get list of parts - Start working on importing excel sheets into the database
5. Images in database - Maybe need to compress and store as files