Link to Github: https://github.com/gurusharma/Store\_Helpline

March 5, 2018

SCUBE Solutions  
SUPERSTORE HELP-LINE

PROGRESS REPORT

Abstract

This document explains the individual progress, financial status, problems and future plans for each group member since last progress report.

**Saqib Jaweed Syed ( Student A )**

I had taken up the task to integrate the three hardware together into one Pi. During the last week I was busy testing the three sensors separately and then together using a breadboard and some jumper wires and the sensors were working and getting the required power. Unluckily, the male pins of the 40 pin connector that I am using on top of my Raspberry Pi are not long enough so the screen fits very loosely on top of it and I will now have to change the connector. The new one will cost about $2.5 + TAX/ea from Adafruit (https://www.adafruit.com/product/2223).

This weekend, I bought an etched PCB project board from Sayal Electronics $5.59 which I had to cut to size so I could fit it in my case and make the connection nicer at the same time. All the soldering is now complete.

My next week’s target is to change the 40 pin connector, get a same color 3D case made for the RFID reader and have all 3 sensors working with their original code from last semester.

**Abhay Singla**

I was given the task of working on the GUI for the pi. I spent a week figuring out what library of python to use for the same. At the end I settled in for “guizero”. It is a very lack-luster library but it gets the job done and moreover it had the easiest tutorial to follow online (https://lawsie.github.io/guizero/about/).

The next steps involved the making of the actual GUI for the project. It took me a week to get familiarized with the library and another one to build the 3 screens that are required for our project.

Now as the basic elements are in place on the screen, I need to put some validation and the import the firebase library and connect it to the database which according to me should not take more than a week of research and implementation.

**Guru Sharma**

I was responsible for the app component and the database. The database chosen for the app is Google's Firebase (https://firebase.google.com/docs/database/). The app connects to the database to read and write information. After reviewing the documentation and following tutorials (https://firebase.google.com/docs/database/android/read-and-write), I was able to setup the database with basic functionality.

So far, the user authentication feature works which allows users to Sign-Up with an email and password of valid format and then Sign-In with the same after successful registration. The Firebase database now also contains some items in the inventory.

I have not been successful yet to display the nested data on the app's shopping cart page. I am following video tutorials on YouTube to have this functionality working. Since I am now familiar with database basics, I believe that it should not take me more than a week to resolve the issue with reading data from nested nodes.

**Financial Update**

The total cost of the project is $60.00 so far but it will increase by $2.5 this week as I will be getting a 40pin GPIO connector.