IOT Project

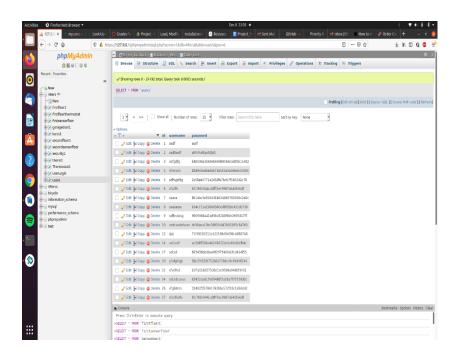
This project is a home automation tool that consists the following

- A) Android app/android java
- B) Apache Server/php codes
- C) Raspberry-pi/python code

The next few images will consist of the app screen and the respective php screen

i) Login screen





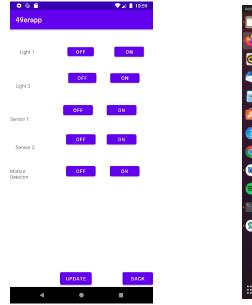
The user login page consists of a sign up(register) and then we have to sign in. MD5 is used for password encryption.

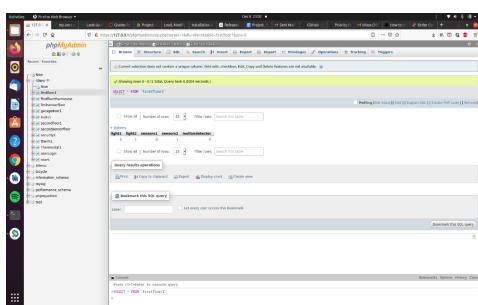
ii) Home screen



The main menu consist of the following options.

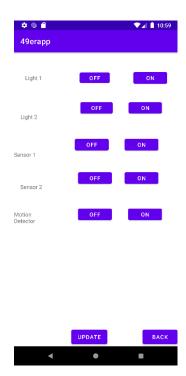
iii) First floor

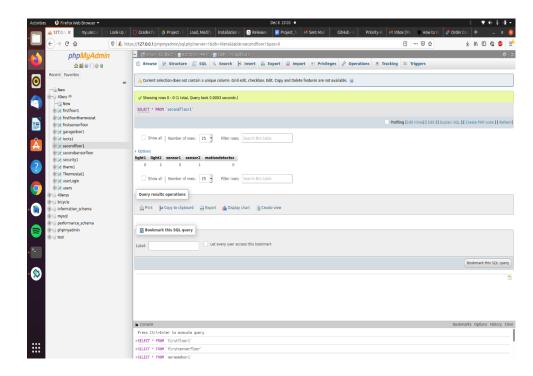




The first floor consists 2 lights, 2 sensors and a motion detector, the off values are stored as 0 and on values are stores as 1.

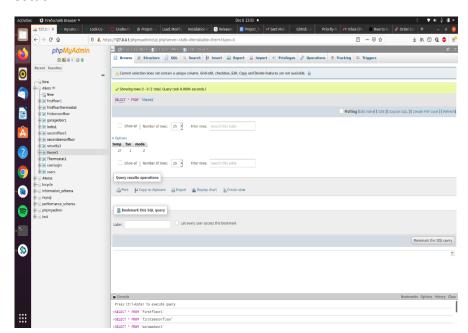
iv) Second floor





v) Thermostat

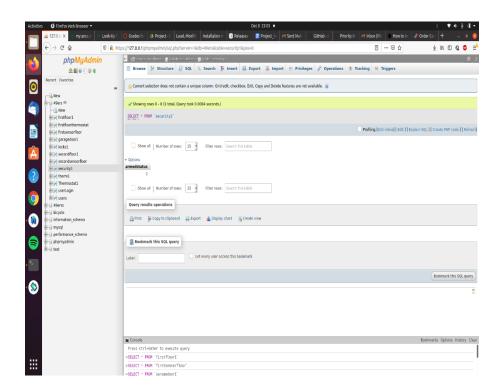




The thermostat page consists of fan where on is 0 and auto is 1 and mode where cool, heat and off are 0,1,2 respectively and the temperature is entered by the user.

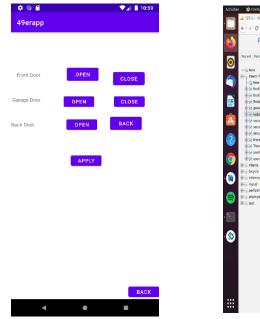
vi) Security

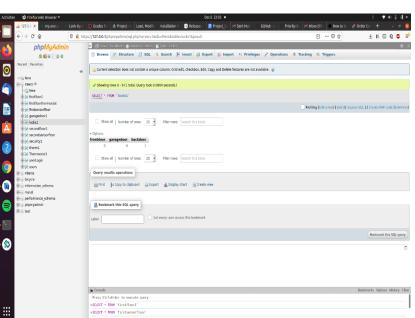




The Security screen consists of armedstay, armedaway and disarmed with 0,1,2 values .

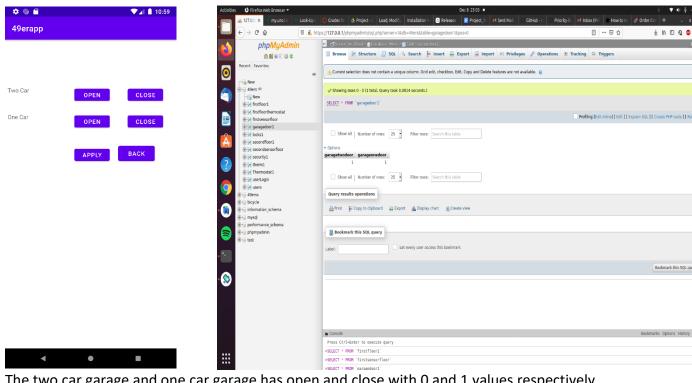
vii) Locks





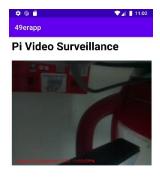
The front door, garage door and back door locks have values 0,1 for close and open.

Garage door viii)



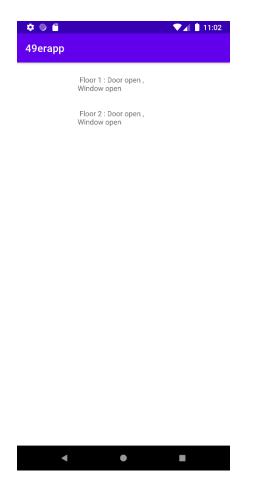
The two car garage and one car garage has open and close with 0 and 1 values respectively.

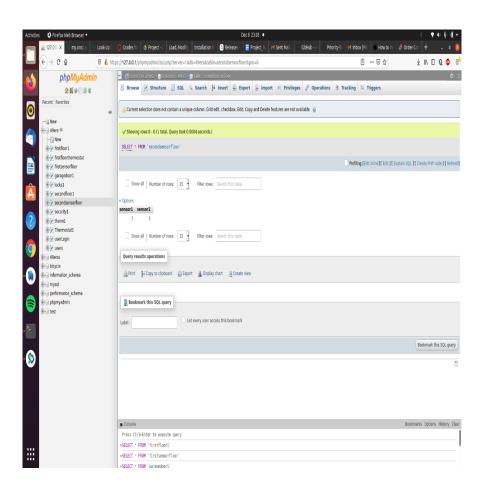
ix) Camera



The camera is hosted by the raspberry pi in a server and it is used for motion detection.

x) Sensors





The sensor values for door and window in floor one and floor two are being updated by the raspberry pi using NMAP and sockets and they are 0 and 1 for open and close respectively.

NMAP is being used by the pi to get the IP of the server and sockets are used to write the sensor values to the server and similarly NMAP and sockets are used to get the values from the server .