﻿Application:

To run this application, first unzip the GlassHome.zip file and upload the file into Android Studio. Once the files are done loading, make sure an emulator is installed in Android Studio and run the project. The GlassHome application will then start up.

If you want to create a new account, click the Create Account text and enter a valid email and password.

Login Information:

Username: test1@gmail.com

Password: password

Username2: test2@gmail.com

Password2: password

Sensors:

To run these codes, first download Arduino. For this to run successfully, a few libraries need to be downloaded. Download the Firebase library from https://github.com/FirebaseExtended/firebase-arduino , as well as the ArduinoJson library that goes along with this one here https://github.com/bblanchon/ArduinoJson. The board we used was Node-MCU, we will need to add this board into the Arduino IDE. We can follow these steps here https://www.instructables.com/id/Quick-Start-to-Nodemcu-ESP8266-on-Arduino-IDE/. Once we add these boards, we have everything necessary to run these codes. Pick the board NodeMCU in the ports menu, and plug in the NodeMCU board. Once plugged in, we can compile the code as well as upload it onto the boards. As soon as these boards are powered, they will start running the codes in a loop.

Directory:

-eArchive Group 12

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code

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+-----> GlassHome // File Containing Source Code XML Files for Android Studio Application

| |----> app

| |-----> src

| |-----> main

| |----> java // compiled Java classes

| |-----> com

| |-----> example

| |-----> shaan

| |-----> hazardapp // Location of all the java class files\

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| |----> app

| |-----> src

| |-----> main

| |----> res

| |-----> layout // All of the XML Layout files

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+----> Sensors // Contains code for all the sensors

| |-----> Flame Sensor

| |-----> Door Sensor

| |-----> Garage Sensor

| |-----> Window Sensor

| |-----> Carbon Monoxide Sensor

| |-----> Air Quality/Hazardous Gas Sensor

| |-----> Camera Sensor

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+----> Firebase // Contains the firebase json file and current database tables

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+----> Documentation // Contains Report 1,2,3 as well as Demo(1 and 2) Slides and Flyers

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+----> Unit/Integration Tests // Contains schematics and descriptions of each sensor