

SMART FIRE ALARM SYSTEMS GUIDE

Smart Fire Alarm Systems is a product currently in development stage. It is developed as a Final Year Project.

The guide of this product contains two parts.

1. Installation
2. Working

1- Installation

The product contains two things in it, Smart Devices (HUB and SLAVE) and an Android app.

- Firstly, the app will be installed in your mobile device. From which you can configure all your devices and monitor the activities of them 24/7.
- You will be handed over with the devices you purchased i.e. Hub Device and Slave Device.
- You can easily install them anywhere you want by yourself by giving them power from socket, but keep in mind to install them in the range of your WIFI device.
- Suppose you have purchased 1 Hub and 3 Slaves and you installed them at you home in different locations. Put a working SIM card in the Hub with balance and check it regularly. There should be balance always in that SIM.
- Open the android app on your mobile, Log-in from your id & password which was created on the website when you bought the devices at the first place and Click the + button on the top left corner after login. Configuration page will open.
- Keep in mind that during configuring your devices the devices should be on and should be in range of your mobile as they will be in AP mode (ready to connect from nearby WIFI) throwing its own signals.
- The name of your devices will appear on the respective screen when you can configure them by clicking one by one on it.
- When you click the device to be configured, next window will open which will show nearby WIFI networks. Select your WIFI network and enter its password.
- In no time your respective device will be configured by your WIFI and starts working.
- Configure the other remaining devices like this way.
- Also, record your voice in the Hub by clicking the record button telling the emergency department about the Fire in your location. Telling them your location also.
- Keep in mind to give your location to your every device after configuration by clicking your devices on showing on the main page of app.
- You can also change the names of your devices. For example, if you installed a device in kitchen, name it, "Kitchen" device so that you do not get confused in emergency situations
- **ALL THE ABOVE STEPS ARE MENDOTARY FOR THE DEVICES TO WORK PROPERLY.**

2-Working

The working of our devices is as follows:

- After complete installation, our devices will start its monitoring purposes.
- **In HUB**, Monitoring has two phases, first is to sense the Smoke intensity continuously around and the second is to sense the heat with the help of temperature sensor in the room.
- If the intensity of smoke gets higher from a certain point then it will ring the alarm installed in the device and send the alert via WIFI on the application handed to the user.
- It will make a call to fire department telling them about the situation by itself using automatic call answering and finally sends a text message to the user in case user is not connected to WIFI.
- The language of call depends upon the user as you have recorded your voice by yourself in installation phase.
- The heat will be sensed and informed after every few seconds to the user via android app with the help of WIFI installed in the device.
- The regular temperature will be shown to your app where you can check the health of your room.
- If the temperature rises and devices shows the temperature in red. It means you have to cool down the room so that it gets back to normal temperature.
- Slaves on the other hand works in the same way but when it senses smoke it informs the Hub devices via WIFI and then Hub makes call to fire department and sends text message to user.