**SMART FIRE ALARM**

A fire alarm system is designed to alert us to an emergency so that we can take action to protect ourselves when smoke, fire or carbon mono-oxide is detected.

Aim of the project

* To detect smoke and alert people to an emergency
* Quench any existing fire
* Send a call and a notification to the victim/owner of property when the smoke is detected.

COMPONENTS

* **HARDWARE**
* ESP32
* MQ2 sensor
* LED
* Relay
* Pump
* Buzzer
* **SOFTWARE**
* IFTTT

**HOW THE SMART FIRE ALARM WORKS.**

The main function of the smart fire alarm is to detect smoke using the MQ2 sensor and sends a call and a notification to the victim or owner of the property.

The MQ2 detects smoke in less the 5 seconds. When the intensity of the smoke is very low, the LED turns blue and the buzzer is triggered to beep at a low frequency of 500 Hz.

When the smoke is intense, the LED turns RED, the LED turns red, the buzzer is then triggered to beep at a high frequency of 2000 Hz. A signal is sent from the relay to the pump to move water from the reservoir through the tube to quench the fire. A call and a notification is then sent to the victim or the owner of the property with the help of the IFTTT app. The status of smoke in the room can be seen through the cayenne platform.

The IFTTT app must be downloaded on your phone and must be configured using your email and password and also creating an applet (if webhooks then VoIP call or notification) in which the webhooks request URL will be used.

**SCHEMATIC DIAGRAM**

