PROJECT CODE

INDUSTRY-SPECIFIC INTELLIGENT FIRE MANAGEMENT SYSTEM

TEAM ID: PNT2022TMID20269

SOURCE CODE:

```
// Chage These Credentials with your Blynk Template credentials
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#define BLYNK_TEMPLATE_ID "TMPLqCSC89Q2"
#define BLYNK_DEVICE_NAME "Fire Detection"
#define BLYNK_AUTH_TOKEN "PxJ7MvV-hMXaEwKe39Lip9vLqZRNSCOX"

#define BLYNK_PRINT Serial
#include <ESP8266WiFi.h>
#include<OneWire.h>
#include<DallasTemperature.h>
#include <BlynkSimpleEsp8266.h>

char auth[] = BLYNK_AUTH_TOKEN;
char ssid[] = "praveen"; // Change your Wifi/ Hotspot Name
char pass[] = "24092001"; // Change your Wifi/ Hotspot Password

BlynkTimer timer;

#define fire D2
#define smoke A0
#define ONE_WIRE_BUS D4
```

```
#define buzzer D7
int fire_Val = 0;
int data = 0;
OneWire oneWire(ONE_WIRE_BUS);
DallasTemperature DS18B20(&oneWire);
float temp = 0;
WidgetLED led(V1);

void setup() //Setup function - only function that is run in deep sleep mode
{
  Serial.begin(9600); //Start the serial output at 9600 baud
  pinMode(GREEN, OUTPUT);
  pinMode(smoke,INPUT);
  pinMode(buzzer,OUTPUT);
  pinMode(fire, INPUT);
  pinMode(RED, OUTPUT);
  pinMode(buzzer, OUTPUT);
  pinMode(ONE_WIRE_BUS, INPUT);

  Blynk.begin(auth, ssid, pass);//Splash screen delay
  delay(2000);
  timer.setInterval(500L, mySensor);
}

void loop() //Loop function
{
  Blynk.run();
  timer.run();
}

void mySensor()
{
  fire_Val = digitalRead(fire);
   sensorAnalogValue = analogRead(smoke);
   sensors.requestTemperatures();
```

```
  temp = DS18B20.getTempCByIndex(0);
    Blynk.virtualWrite(V3,temp);
  if ((fire_Val == HIGH)||(data > 500)||(temp > 35))
  {
    Blynk.logEvent("fire_alert");
    digitalWrite(GREEN, LOW);
    digitalWrite(RED, HIGH);
    tone(buzzer, 1000);
    Blynk.virtualWrite(V0, 1);
    Serial.print("fIRE Level: ");
    Serial.println(fire_Val);
    Serial.write("fire detected");
    led.on();
  }

  else
  {
    digitalWrite(GREEN, HIGH);
    digitalWrite(RED, LOW);
    noTone(buzzer);
    Blynk.virtualWrite(V0, 0);
    Serial.print("fIRE Level: ");
    Serial.println(fire_Val);
    led.off();
    Serial.write("no fire detected");
    Serial.println(data);
    Serial.println(temp);
  }
}
```