DEVELOPMENT PHASE
SPRINT 3

Date	14 November 2022
Team ID	PNT2022TMID45101
Project Name	Industry-Specific Intelligent Fire Management System
Marks Maximum	8 Marks

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 GREEN D5
#define RED D6
```

```
#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);   data =
analogRead(smoke);
Blynk.virtualWrite(V2,data);
  DS18B20.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);
  }
}
```