**PROJECT CODE**

INDUSTRY-SPECIFIC INTELLIGENT FIRE MANAGEMENTSYSTEM

TEAM ID: PNT2022TMID20931

**SOURCE CODE:**

// Chage These Credentials with your Blynk Template credentials

// Chage These Credentials with your Blynk Template credentials #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);

}

}