Sprint-2

Project Development - Delivery

Date	16 November 2022
Team ID	PNT2022TMID00837
Project Name	INDUSTRY - SPECIFIC INTELLIGENT FIRE MANAGEMENT SYSTEM

CODE:

```
int LED_PIN = 3;
int Motor_PIN= 10;
int mq2 = 4; int value = 0;
int flame_sensor_pin = 10 ;
int flame_pin = HIGH ;
#define PIN_LM35 39
#define ADC_VREF_mV 3300.0
#define ADC_RESOLUTION 4096.0
void setup()
{
Serial.begin(115200);
pinMode(LED_PIN, OUTPUT);
pinMode(mq2, INPUT);
pinMode ( flame_sensor_pin , INPUT );

pinMode(BUZZER_PIN, OUTPUT);
}
void temperature()
{
int adcVal = analogRead(PIN_LM35);
float milliVolt = adcVal * (ADC_VREF_mV /
ADC_RESOLUTION); float tempC = milliVolt / 10;
Serial.print("Temperature: ");
Serial.print(tempC);
Serial.print("°C");
if(tempC > 60)
{
Serial.println("Alert");
digitalWrite(Motor_PIN, HIGH); // turn on
}
else
{
```

```
digitalWrite(Motor_PIN, LOW); // turn off
}
}
void GasSensors()
{int gassensorAnalogmq2 = analogRead(mq2);
Serial.print("mq2 Gas Sensor: ");
Serial.print(gassensorAnalogmq2);
Serial.print("\t");
Serial.print("\t");
Serial.print("\t");
if (gassensorAnalogmq2 > 1500)
{
Serial.println("mq2Gas");//message to user
Serial.println("Alert");
}
else
{
Serial.println("No mq2Gas");//message to user
}
}
void flamesensor()
{
flame_pin = digitalRead ( flame_sensor_pin ) ;
if (flame_pin == LOW )
{
Serial.println ( " ALERT: FIRE DETECTED" ) ;
digitalWrite ( Motor_PIN , HIGH ) ;
}
else
{
Serial.println ( " NO FIRE DETECTED " ) ;
digitalWrite ( Motor_PIN , LOW ) ;
} }
void loop() {
temperature();
GasSensors();
flame}
```