Sprint-3

Team ID	PNT2022TMID50107
Project Name	Industry-specific intelligent fire management system

DELIVERY OF SPRINT-3

```cpp
#include<Servo.h>

#include <LiquidCrystal.h>


const int temperaturePin = 0;

const int buzzer = 12;

int gasSensorPin=A1;

int sensorval;


Servo servo1,servo2;

int servo1Pin=11;

int servo2Pin=10;


int node1_led=9;

int node2_led=8;


LiquidCrystal lcd(7, 6, 2, 3, 4, 5);


int buttonstate = 0;

const int resetbtn = 13;
```

```
int repeat = 0;


void setup()

{

  pinMode(buzzer, OUTPUT);


  servo1.attach(servo1Pin);

  servo2.attach(servo2Pin);

  servo1.write(90);

  servo2.write(90);


  pinMode(node1_led,OUTPUT);

  pinMode(node2_led,OUTPUT);

  pinMode(resetbtn,INPUT);


  lcd.begin(16,2);

}


void loop()

{

        float voltage, degreesC;

        voltage = getVoltage(temperaturePin);

        degreesC = (voltage - 0.5) * 100.0;
```

```
        sensorval=analogRead(gasSensorPin);

        buttonstate = digitalRead(resetbtn);


if(buttonstate == HIGH) {

        repeat = 0;

}

        if(degreesC>30 || sensorval>800 || repeat == 1)

        {

    repeat = 1;

    tone(buzzer, 500, 500);

    servo1.write(0);

    servo2.write(0);

    lcd.clear();

    lcd.setCursor(0,0);

        lcd.print("Alart Fire Fire!!");

    lcd.setCursor(0,1);

    lcd.print("Quick RESQUE");


    digitalWrite(node1_led,HIGH);

    digitalWrite(node2_led,LOW);


    delay(1000);

    tone(buzzer,600,800);

    digitalWrite(node1_led,LOW);
```

```
    delay(2000);

        }

        else{

    servo1.write(90);

    servo2.write(90);

    delay(1000);


    digitalWrite(node2_led,HIGH);

    digitalWrite(node1_led,LOW);


    lcd.clear();

        lcd.setCursor(0,0);

        lcd.print("Safe Mode");

    lcd.setCursor(6,0);

    lcd.print(degreesC);

    lcd.print("C");

    lcd.setCursor(0,1);

    lcd.print("Gas Limit.:");

    lcd.print(sensorval);

  }


}
float getVoltage(int pin)

{
```

```
  return(analogRead(pin)*0.004882814);

}
```