Final Deliverables
Final code

Date	12 November 2022
Team ID	PNT2022TMID54096
Project Name	Industry Specific-Intelligent Fire Management System

```
#include<SoftwareSerial.h>
#include<TinyGPS.h>

SoftwareSerial gsm(7,8);

#define BLYNK_TEMPLATE_ID "TMPL-uhc59_T"
#define BLYNK_DEVICE_NAME "Fire alert"
#define BLYNK_AUTH_TOKEN "jkfkhu5fzDC9_PBdtssloT9OmXq3THwb"

#define BLYNK_FIRMWARE_VERSION        "0.1.0"

#define BLYNK_PRINT Serial
//#define BLYNK_DEBUG

#define APP_DEBUG

#include <ESP8266WiFi.h>
#include <BlynkSimpleEsp8266.h>

#include "DHT.h"
#define DHTPIN 5
#define DHTTYPE DHT22

DHT dht(DHTPIN, DHTTYPE);
char auth[]=BLYNK_AUTH_TOKEN;
```

```
char ssid[]="OPPO A52";
char pass[]="6380604277";

int Gas=A0;
int Flame=4;
int buzz=2;
int redLight=3;
int greenLight=4;
float sensorvalue;
int flamevalue;
void setup() {
   pinMode(Gas, INPUT);
   pinMode(Flame, INPUT);
   pinMode(buzz,OUTPUT);
   pinMode(redLight,OUTPUT);
   pinMode(greenLight,OUTPUT);
 Serial.begin(115200);
 Blynk.begin(auth,ssid,pass);
   dht.begin();
   gsm.begin(9600);
   }

void loop() {
    sensorvalue = analogRead(Gas);
    flamevalue= digitalRead(Flame);
   Blynk.run();
Blynk.virtualWrite(V0,sensorvalue);
   Blynk.virtualWrite(V1,!(flamevalue));
   Serial.print("Gas value:");
   Serial.println(sensorvalue);
   Serial.print("flame state:");
```

```
  Serial.println(!(flamevalue));

  float h = dht.readHumidity();
 float t = dht.readTemperature();

 if (isnan(h) || isnan(t)) {
  Serial.println("Failed to read from DHT sensor!");
  return;
 }

 Serial.print("Humidity: ");
 Serial.print(h);
 Serial.print(" %\t");
 Serial.print("Temperature: ");
 Serial.print(t);

  if(flamevalue==0){
     tone(buzz,1000,200);
     digitalWrite(redLight,HIGH);
     digitalWrite(greenLight,LOW);

     gsm.println("AT+CMGF=1\r");
                                          delay(1000);
                                           gsm.print("AT+CSMP=17,167,0,0\r");
                                            delay(1000);
                                              gsm.println("AT+CMGS=\"+916380604277\"\r");//replace x
by your number
                                               delay(1000);
                                                gsm.write("Fire alert\n");
                                                  delay(100);
                                                    gsm.write("location:Latitude:13.0663,Longitude:80.1112
currentlocation:http://maps.google.com/maps?&z=15&mrt=yp&t=k&q=13.0663,80.1112");
```

```
                                                delay(100);
                                                 gsm.println((char)26);
                                                  delay(1000);
  }
  else{
     noTone(buzz);
     digitalWrite(redLight,LOW);
    digitalWrite(greenLight,HIGH);
  }

  if(sensorvalue>500){
     tone(buzz,1000,200);
     digitalWrite(redLight,HIGH);
     digitalWrite(greenLight,LOW);

gsm.println("AT+CMGF=1\r");
                                          delay(1000);
                                           gsm.print("AT+CSMP=17,167,0,0\r");
                                            delay(1000);
                                              gsm.println("AT+CMGS=\"+916380604277\"\r");//replace x
by your number
                                               delay(1000);
                                                 gsm.write("Gas has Leakead\n");
                                                  delay(100);
                                                    gsm.write("location:Latitude:13.0663,Longitude:80.1112
currentlocation:http://maps.google.com/maps?&z=15&mrt=yp&t=k&q=13.0663,80.1112");
                                                delay(100);
                                                 gsm.println((char)26);
                                                  delay(1000);
  }
  else{
      noTone(buzz);
```

```
        digitalWrite(redLight,LOW);
       digitalWrite(greenLight,HIGH);
}
}
```