Project Development Phase
Sprint-4

Date	23 October 2022
Team ID	PNT2022TMID40415
Project Name	Industry Specific-Intelligent Fire Management System
Maximum Marks	2

```
#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);
}
}
```