Project Development Phase
Sprint-4

Date	7 November 2022
Team ID	PNT2022TMID24229
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);
}
}
```