AURDINO UNO CODE

#include <SoftwareSerial.h>

void sendSMS(String message);

// Define pins

const int flamePin = 2;

const int mq5Pin = A0;

const int buzzerPin = 9; // Buzzer pin

const int thresholdGas = 400; // Adjust based on your environment

SoftwareSerial sim900(7, 8); // TX, RX

void setup() {

pinMode(flamePin, INPUT);

pinMode(mq5Pin, INPUT);

pinMode(buzzerPin, OUTPUT); // Set buzzer pin as output

digitalWrite(buzzerPin, LOW);

Serial.begin(9600);

sim900.begin(9600);

delay(1000);

sim900.println("AT"); // Test communication

delay(1000);

sim900.println("AT+CMGF=1"); // Set SMS to text mode

delay(1000);

}

void loop() {

bool flameDetected = digitalRead(flamePin) == LOW; // LOW means flame detected

int gasLevel = analogRead(mq5Pin);

// Serial.println("Working" );

// Serial.print("Flame:" );

// Serial.println(digitalRead(flamePin));

Serial.print("MQ-5 Value:" );

Serial.println(analogRead(mq5Pin));

Serial.print("Flame Detection:");

Serial.println(flameDetected);

if (flameDetected) {

digitalWrite(buzzerPin, HIGH); // Turn buzzer on

sendSMS("Alert! 🔥 Flame detected!");

Serial.println("Flame detected!");

delay(100); // Avoid SMS spam

}

else{

digitalWrite(buzzerPin, LOW);

}

if (gasLevel > thresholdGas) {

digitalWrite(buzzerPin, HIGH); // Turn buzzer on

sendSMS("Warning! Gas leak detected! MQ5 level: " + String(gasLevel));

Serial.println("Gas detected: " + String(gasLevel));

delay(1000); // Avoid SMS spam

} else {

digitalWrite(buzzerPin, LOW); // Turn buzzer off after alert

}

delay(500);

}

void sendSMS(String message) {

sim900.println("AT+CMGS=\"+918374677054\""); // Replace with your phone number

delay(100);

sim900.print(message);

delay(100);

sim900.write(26); // CTRL+Z to send

delay(500);

}