GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES

PROJECT DEVELOPMENT PHASE

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SPRINT 4

#include <LiquidCrystal.h>

LiquidCrystal lcd(5,6,8,9,10,11);

int redled = 2;

int greenled = 3;

int buzzer = 4;

int sensor = A0;

int sensorThresh = 400;

void setup()

{

pinMode(redled, OUTPUT);

pinMode(greenled,OUTPUT);

pinMode(buzzer,OUTPUT);

pinMode(sensor,INPUT);

Serial.begin(9600);

lcd.begin(16,2);

}

void loop()

{

int analogValue = analogRead(sensor);

Serial.print(analogValue);

if(analogValue>sensorThresh)

{

digitalWrite(redled,HIGH);

digitalWrite(greenled,LOW);

tone(buzzer,1000,10000);

lcd.clear();

lcd.setCursor(0,1);

lcd.print("ALERT");

delay(1000);

lcd.clear();

lcd.setCursor(0,1);

lcd.print("EVACUATE");

delay(1000);

}

else

{

digitalWrite(greenled,HIGH);

digitalWrite(redled,LOW);

noTone(buzzer);

lcd.clear();

lcd.setCursor(0,0);

lcd.print("SAFE");

delay(1000);

lcd.clear();

lcd.setCursor(0,1);

lcd.print("ALL CLEAR");

delay(1000);

}

}