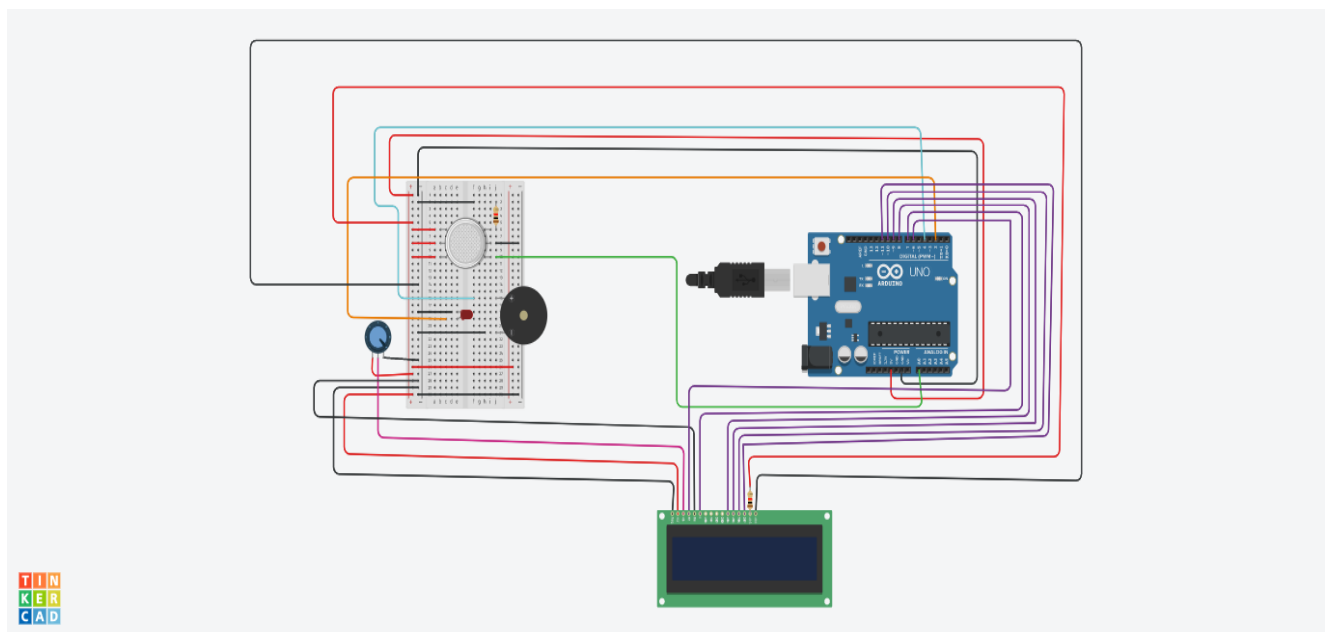


PROJECT DEVELOPMENT PHASE

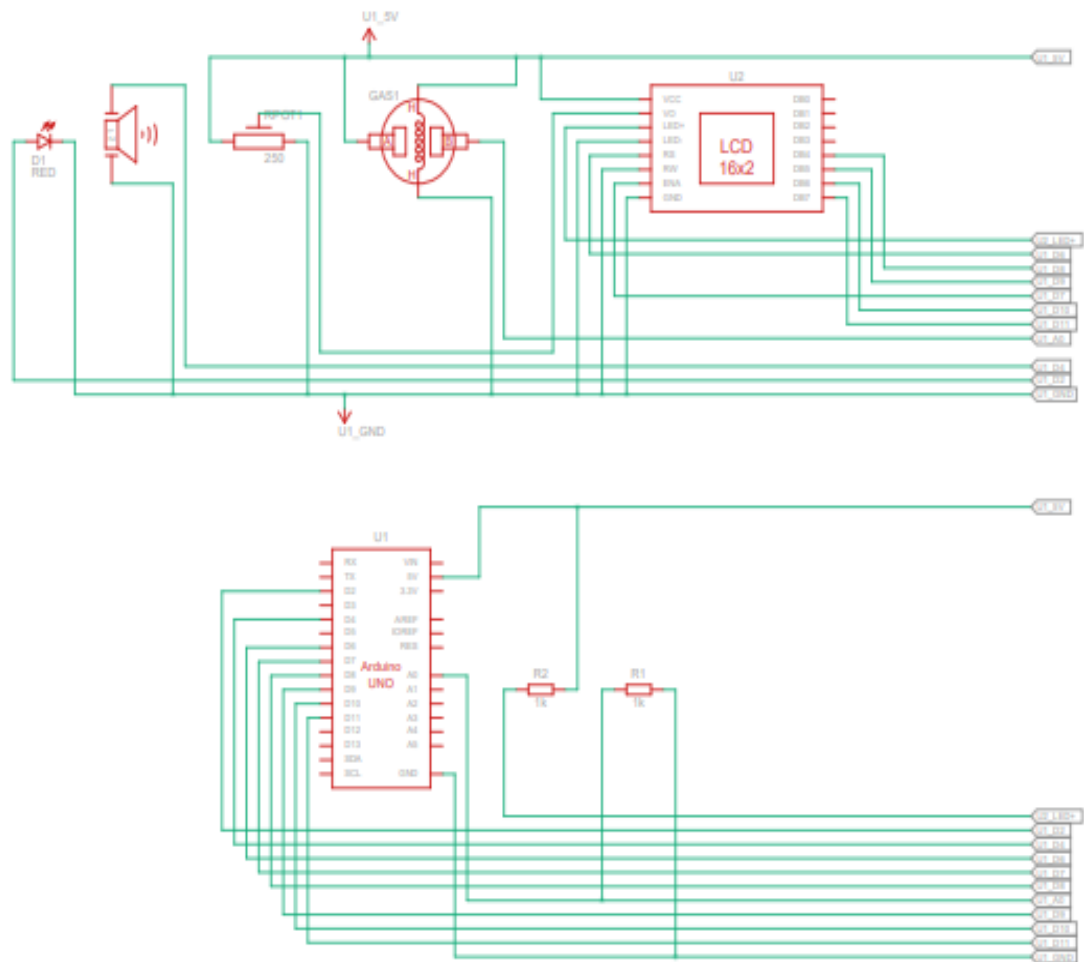
SPRINT-1

DATE	10 November 2022
TEAM ID	PNT2022TMID35489
TITLE	GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES

CIRCUIT:



SCHEMATIC DIAGRAM:



CODE:

```
#include <LiquidCrystal.h>

LiquidCrystal lcd(6, 7, 8, 9, 10, 11);

float gasPin = A0;

float gasLevel;

int ledPin = 2;

int buzzPin = 4;


void setup(){
    pinMode(ledPin, OUTPUT);
    pinMode(gasPin,INPUT);
    Serial.begin(9600);
    lcd.begin(16, 2);
    lcd.setCursor(0,0);
    lcd.print("  WELCOME  ");
    lcd.setCursor(0,2);
    lcd.print("GAS ALERT SYSTEM");
    delay(1000);
    lcd.clear();
}

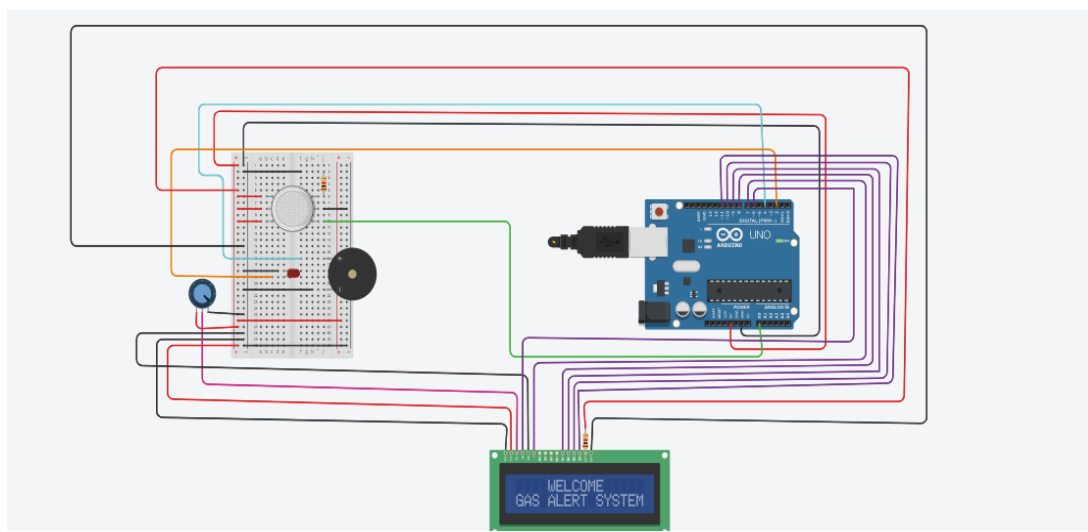

void loop(){
    gasLevel = analogRead(gasPin);
    gasDetected(gasLevel);
    buzzer(gasLevel);
}
```

```
void gasDetected(float gasLevel){  
    if(gasLevel >= 250){  
        digitalWrite(buzzPin,HIGH);  
        digitalWrite(ledPin,HIGH);  
        lcd.setCursor(0,0);  
        lcd.print("  GAS:");  
        lcd.print(gasLevel);  
        lcd.setCursor(0,2);  
        lcd.print("  ALERT  ");  
        delay(1000);  
        lcd.clear();  
    }  
    else{  
        digitalWrite(ledPin,LOW);  
        digitalWrite(buzzPin,LOW);  
        lcd.setCursor(0,0);  
        lcd.print("  GAS:");  
        lcd.print(gasLevel);  
        lcd.setCursor(0,2);  
        lcd.print("  SAFE  ");  
        delay(1000);  
        lcd.clear();  
    }  
}
```

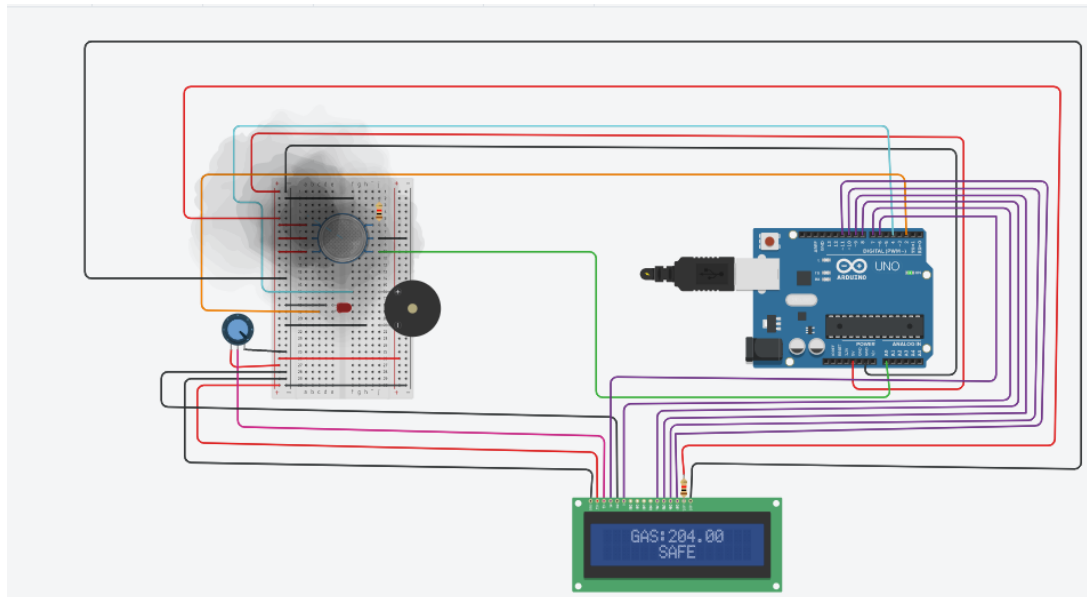
```
void buzzer(float gasLevel){  
  if(gasLevel>=250)  
  {  
    for(int i=0; i<=30; i=i+10)  
    {  
      tone(4,i);  
      delay(400);  
      noTone(4);  
      delay(400);  
    }  
  }  
}
```

OUTPUT:

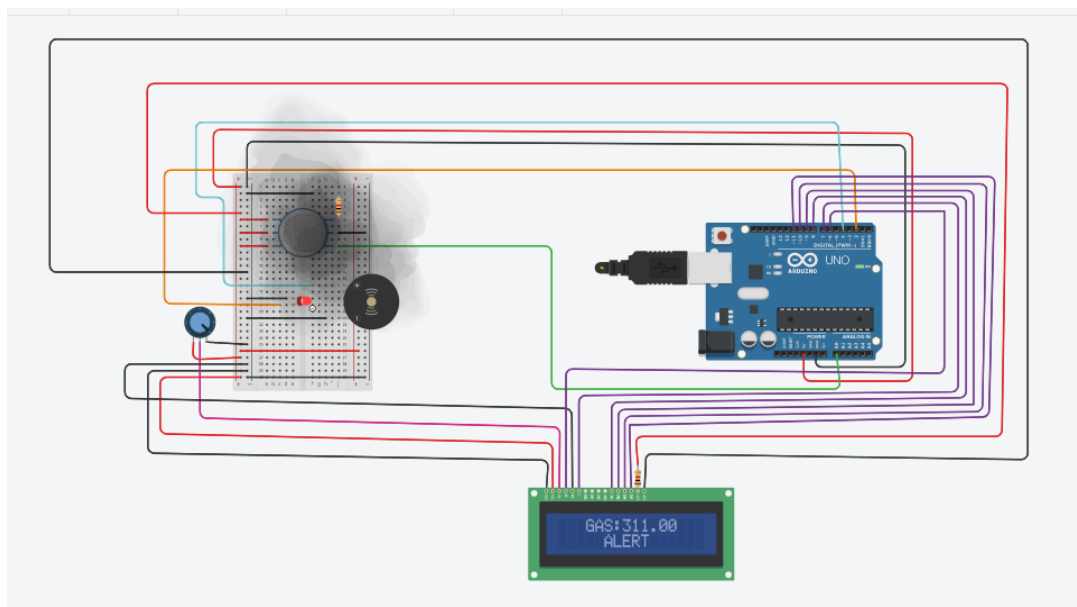
1.INITIAL SCREEN:



2.WHEN THE GAS LEVEL IS LESS THAN 250



3.WHEN THE GAS LEVEL IS MORE THAN 250:



TINKER CAD LINK:

<https://www.tinkercad.com/things/i142DB6zDXB-frantic-maimu/editel?tenant=circuits>

DEMO LINK:

https://drive.google.com/drive/folders/1KK4blSqfIC2P_tRCt0yySBf8gn-I2vsp?usp=share_link