CREATING IBM CLOUD SERVICE

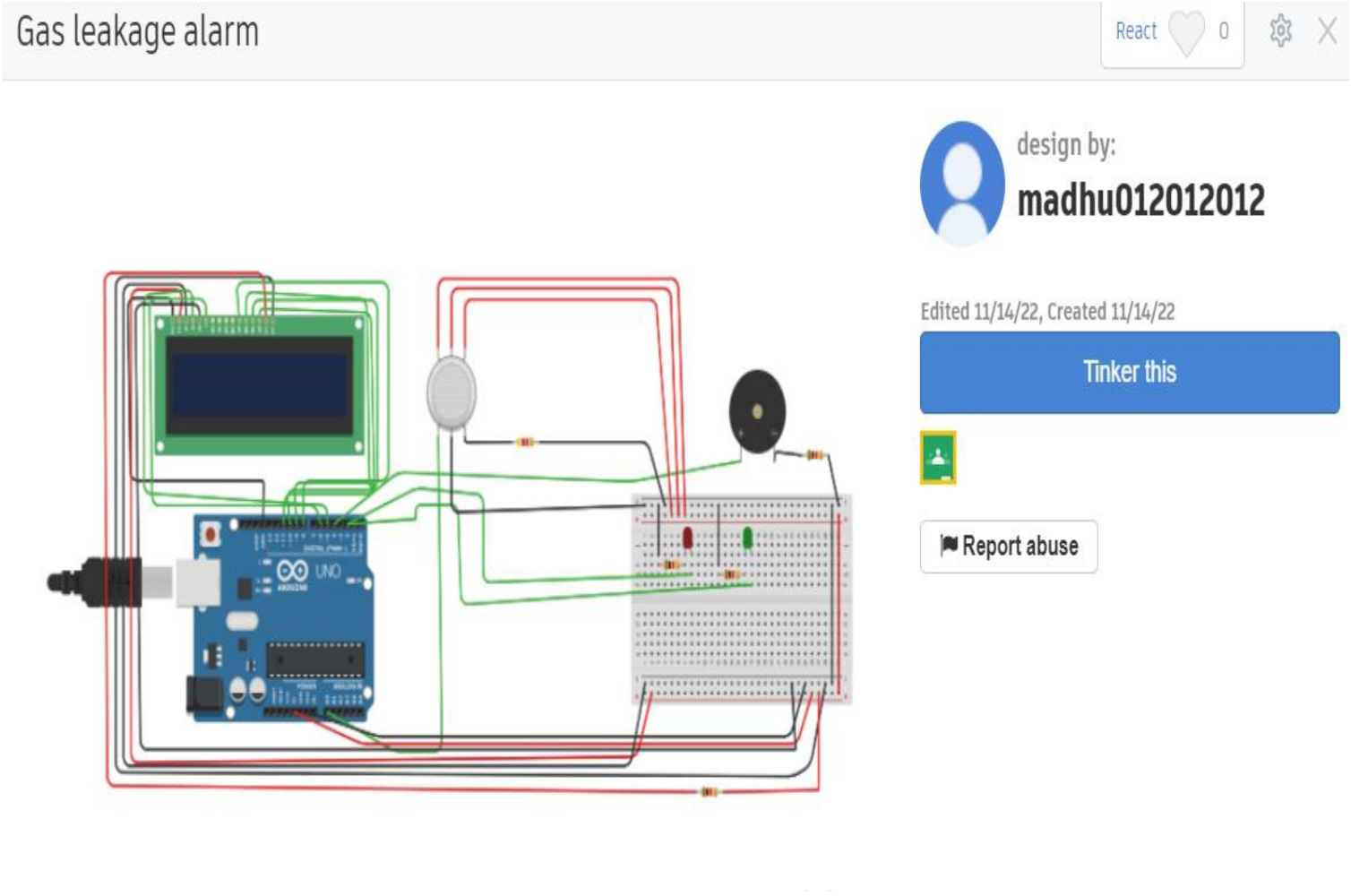
FINAL DELIVERABLES

Date	12 November 2022
Team ID	PNT2022TMID00641
Project Name	GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES

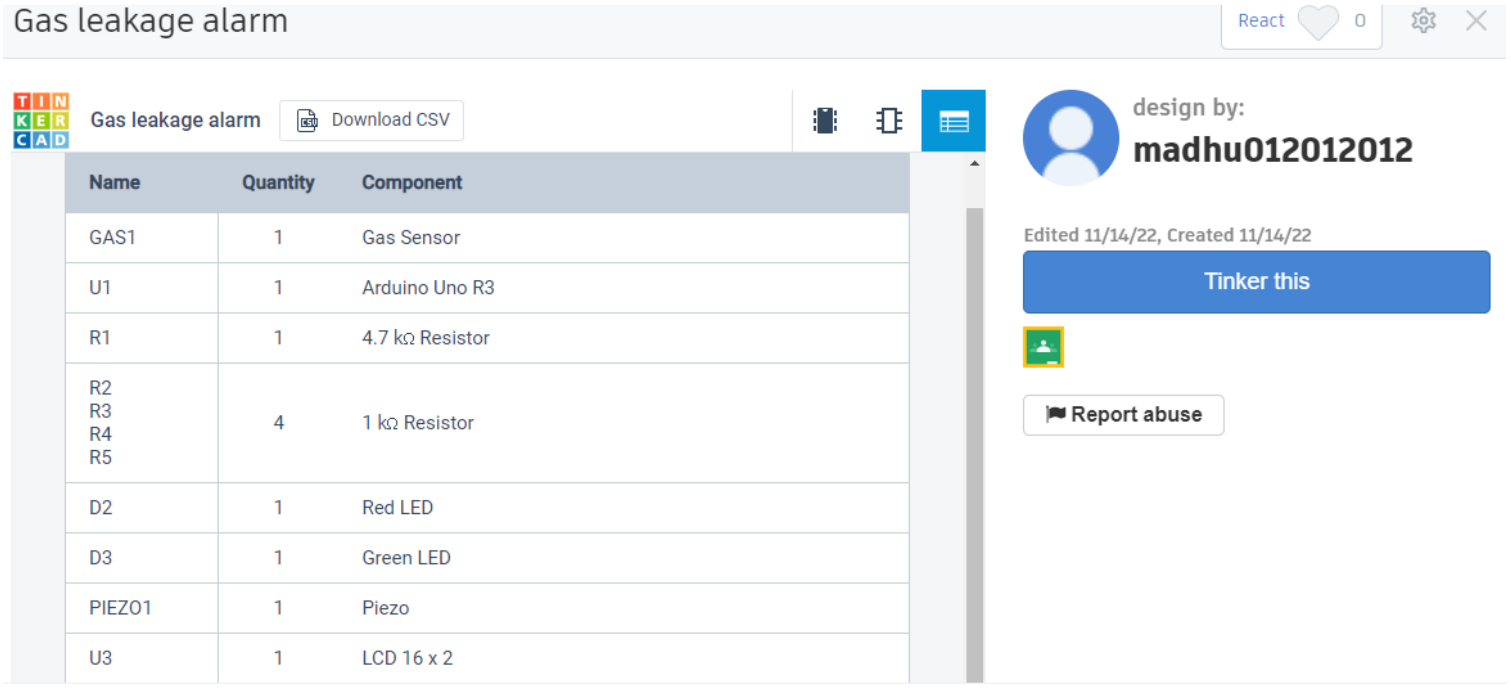
PROJECT DEMO LINK

https://www.tinkercad.com/things/1xP2c2fgH5y

Circuit diagram



components



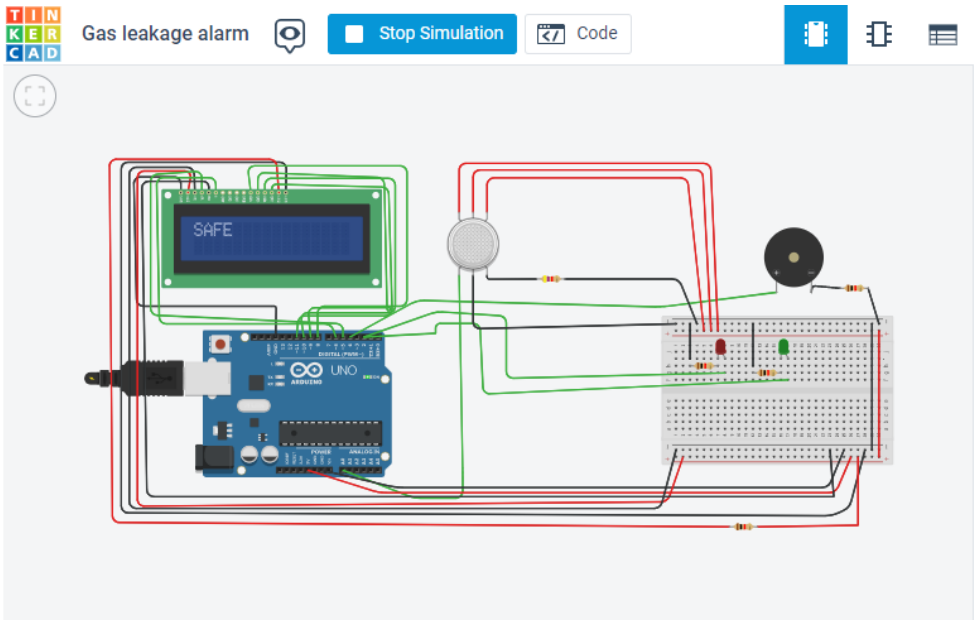
Name	Quantity	Component
GAS1	1	Gas Sensor
U1	1	Arduino Uno R3
R1	1	4.7 kΩ Resistor
R2 R3 R4 R5	4	1 kΩ Resistor
D2	1	Red LED
D3	1	Green LED
PIEZO1	1	Piezo
U3	1	LCD 16 x 2

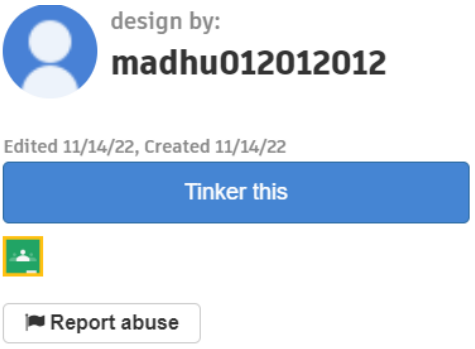
Source code

```
#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);
 }

}
```

output

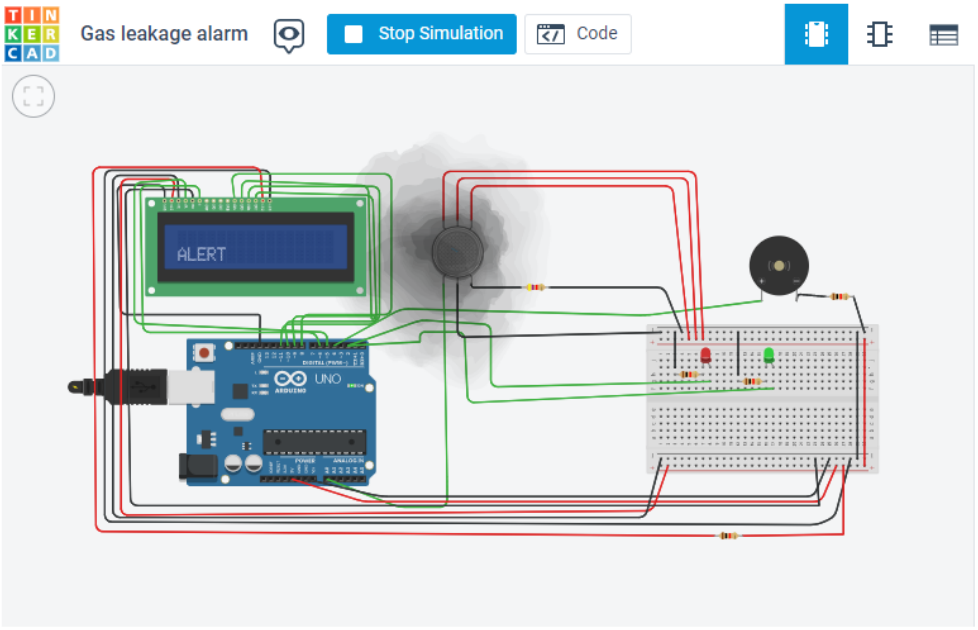




Gas leakage alarm

Stop Simulation

Code



design by:

madhu012012012

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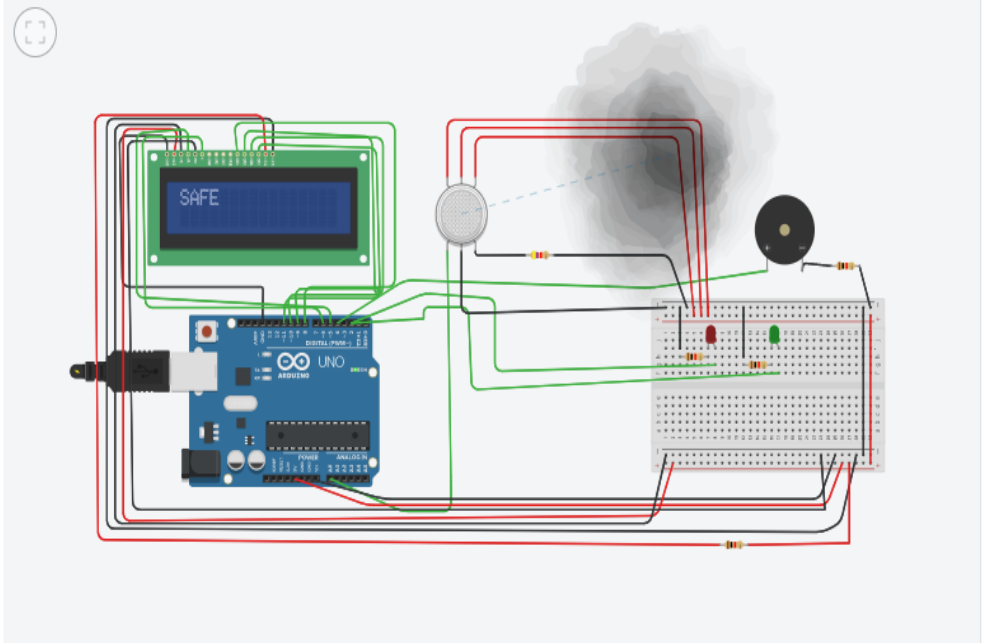
Gas leakage alarm

Stop Simulation

Code



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