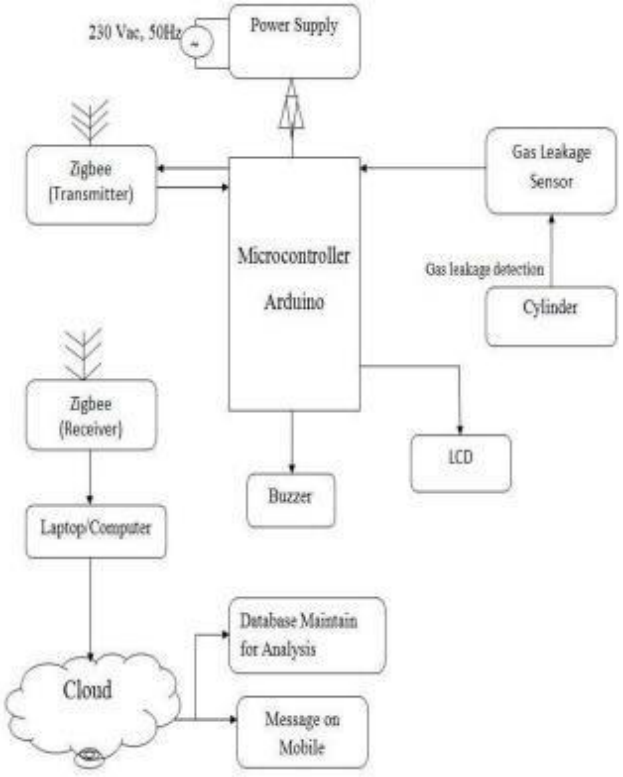
DELIVERY OF SPRINT-2

Date	02 November 2022
Team ID	PNT2022TMID13412
Project Name	Gas Leakage Monitoring and Alerting System

ARCHITECTURE



code

```
#include <LiquidCrystal.h>
LiquidCrystal lcd(2,3,4,5,6,7);
#include <SoftwareSerial.h>

SoftwareSerial mySerial(9, 10);

int gasValue = A0;
int data = 0;
int buzzer = 13;
int G_led = 8;
int R_led = 9;



void setup()
{
  pinMode(buzzer,OUTPUT);
pinMode(R_led,OUTPUT);
pinMode(G_led,OUTPUT);
randomSeed(analogRead(0));
mySerial.begin(9600);
Serial.begin(9600);
lcd.begin(16,2);
pinMode(gasValue, INPUT);
lcd.print (" Gas Leakage ");
lcd.setCursor(0,1);
lcd.print (" Detector Alarm ");
delay(3000);
lcd.clear();
}

void loop()
{

data = analogRead(gasValue);
Serial.print("Gas Level: ");
```

```
Serial.println(data);
lcd.print ("Gas Scan is ON");
lcd.setCursor(0,1);
lcd.print("Gas Level: ");
lcd.print(data);
delay(1000);

if ( data > 90) //
{
  digitalWrite(buzzer, HIGH);
digitalWrite(R_led, HIGH); // Turn LED on.
digitalWrite(G_led, LOW); // Turn LED off.
SendMessage();
Serial.print("Gas detect alarm");
lcd.clear();
lcd.setCursor(0,0);
lcd.print("Gas Level Exceed");
lcd.setCursor(0,1);
lcd.print("SMS Sent");

delay(1000);

}
else
{
  digitalWrite(buzzer, LOW);
digitalWrite(R_led, LOW); // Turn LED off.
digitalWrite(G_led, HIGH); // Turn LED on.
Serial.print("Gas Level Low");
lcd.clear();
lcd.setCursor(0,0);
lcd.print("Gas Level Normal");

delay(1000);
}

lcd.clear();
}
```

```
void SendMessage()
{
Serial.println("I am in send");
mySerial.println("AT+CMGF=1");
delay(1000);
mySerial.println("AT+CMGS=\"+91xxxxxxxxxx\"\r");
delay(1000);
mySerial.println("Excess Gas Detected.");
mySerial.println(data);
delay(100);
mySerial.println((char)26);
delay(1000);
}
```