9512 JP COLLEGE OF ENGINEERING

AIR QUALITY MONTIORING SYSTEM

Proj_21193_TEAM_1

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IOT_PHASE:4(DEVELOPMENT PART 2)

```java
mport java.io.*;

import java.net.*;

import java.util.Date;


public class AirQualityMonitor {

   public static void main(String[] args) {

      int port = 8080; // Change to the appropriate port

      try {

         ServerSocket serverSocket = new ServerSocket(port);

         System.out.println("Air Quality Monitoring Server is running on port " + port);
```

```java
        while (true) {

            Socket clientSocket = serverSocket.accept();

            System.out.println("Client connected from: " + clientSocket.getInetAddress());


            // Handle client data (Assuming sensor data is sent as text)

            BufferedReader reader = new BufferedReader(new
InputStreamReader(clientSocket.getInputStream()));

            String sensorData = reader.readLine();

            System.out.println("Received data: " + sensorData);


            // You can parse and process the sensor data here


            // For simplicity, let's just log the data to a file

            logDataToFile(sensorData);


            clientSocket.close();

        }

    } catch (IOException e) {

        e.printStackTrace();

    }

}


private static void logDataToFile(String data) {

    try {

        PrintWriter writer = new PrintWriter(new FileWriter("air_quality_data.txt", true));

        writer.println(new Date() + ": " + data);

        writer.close();

    } catch (IOException e) {

        e.printStackTrace();
```
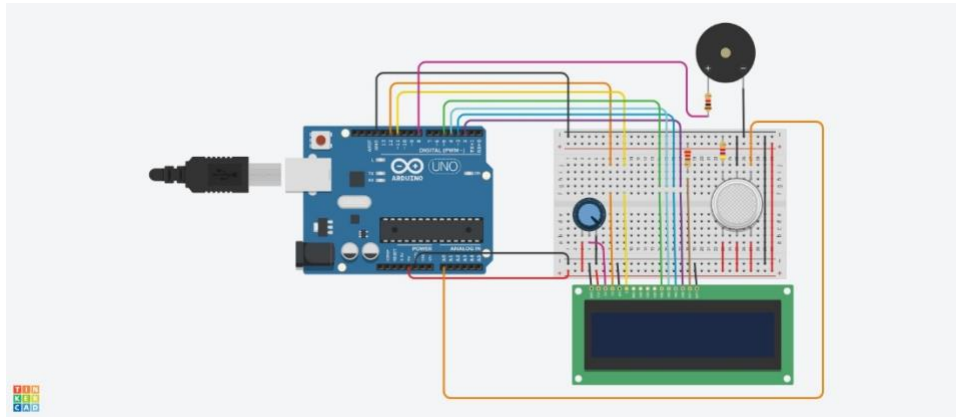
```
        }

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```

```
<!DOCTYPE html>

<html>

<head>

   <title>Air Quality Monitor</title>

</head>

<body>

   <h1>Air Quality Monitoring System</h1>

   <p>CO2 Level: <span id="co2Level">Loading...</span> ppm</p>

   <p>PM2.5 Level: <span id="pm25Level">Loading...</span> µg/m³</p>


   <script>

      // JavaScript code to fetch data from the server and update the HTML

      function updateAirQuality() {

         // Use AJAX, Fetch, or other methods to get data from the server

         // Update the values inside the span elements with real-time data

      }

      // Call the function to update the data at regular intervals

      setInterval(updateAirQuality, 5000); // Update every 5 seconds

   </script>

</body>

</html>
```