**ENVIRONMENTAL MONITORING**

**(HUMIDITY AND TEMPERATURE MONITORING)**

*[In this part you will continue building your project. ]*

*Continue building the project by developing the environmental monitoring platform. Use web development technologies (e.g., HTML, CSS, JavaScript) to create a platform that displays real-time environmental data. Design the platform to receive and display real-time temperature and humidity data from IoT devices.*

***Environmental monitoring(humidity and temperature monitoring)website design***



**CODE:**

**//html code:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Humidity and Temperature Monitor</title>

<link rel="stylesheet" href="phase4.css">

</head>

<body style="background-color:powderblue;"><center>

<h1>ENVIRONMENTAL MONITORING</h1>

<div class="container">

<h2>Humidity and Temperature Monitor</h2>

<div class="data">

<div class="humidity">

<h2>Humidity</h2>

<p id="humidity">--%</p>

</div>

<div class="temperature">

<h2>Temperature</h2>

<p id="temperature">--°C</p>

</div>

</div>

</body>

<script src="phase4.js"></script>

</body>

</html>

</html>

**//CSS code:**

*body {*

*font-family: Arial, sans-serif;*

*background-color: #f4f4f4;*

*margin: 0;*

*padding: 200px;*

*}*

*.container {*

*margin: 0 auto;*

*background-color: #fff;*

*padding: 20px;*

*border-radius: 10px;*

*box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);*

*text-align: center;*

*}*

*h1 {*

*text-align: center;*

*position: sticky;*

*top: 0;*

*left: 0;*

*z-index: 100;*

*padding: .5rem 5rem;*

*box-shadow: 5px 5px 20px rgba(0, 0, 0,.5);*

*background: black;*

*color: white;*

*letter-spacing: 3px;*

*}*

*h2 {*

*color: #333;*

*}*

*.data {*

*display: flex;*

*justify-content: space-around;*

*margin-top: 20px;*

*}*

*.humidity,*

*.temperature {*

*width: 45%;*

*padding: 10px;*

*background-color: #f7f7f7;*

*border-radius: 5px;*

*box-shadow: 0 0 5px rgba(0, 0, 0, 0.2);*

*}*

*h2 {*

*color: #333;*

*margin: 100px;*

*}*

*p {*

*font-size: 24px;*

*margin: 10px 0;*

*}*

***//JAVA SCRIPT CODE***

*// Simulated data for humidity and temperature*

*const simulatedData = {*

*humidity: getRandomValue(0, 100) + "%",*

*temperature: getRandomValue(15, 35) + "°C",*

*};*

*// Function to update the displayed data*

*function updateData() {*

*document.getElementById("humidity").textContent = simulatedData.humidity;*

*document.getElementById("temperature").textContent = simulatedData.temperature;*

*}*

*// Function to generate random values for humidity and temperature*

*function getRandomValue(min, max) {*

*return (Math.random() \* (max - min) + min).toFixed(2);*

*}*

*// Update data initially*

*updateData();*

*// Update data every 5 seconds (simulating real-time data)*

*setInterval(() => {*

*simulatedData.humidity = getRandomValue(0, 100) + "%";*

*simulatedData.temperature = getRandomValue(15, 35) + "°C";*

*updateData();*

*}, 5000);*