

This example will be a simplified web application for real-time temperature and humidity data display. Below are the key steps involved:

### 1. Set Up the Development Environment:

- Ensure you have a text editor and a web server installed. You can use simple Python's HTTP server for development.

### 2. Create the HTML Structure:

- Start by creating an HTML file to structure the web page. You'll have elements for data display and user interaction.

```
html
<!DOCTYPE html>
<html>
<head>
  <title>Environmental Monitoring Platform</title>
</head>
<body>
  <div id="data-container">
    <h1>Real-time Environmental Data</h1>
    <p>Temperature: <span id="temperature">--</span> °C</p>
    <p>Humidity: <span id="humidity">--</span> %</p>
  </div>
</body>
</html>
```

### 3. Add CSS Styling:

- Create a separate CSS file to style the web page.

```
css
/* style.css */
```

```
body {  
    font-family: Arial, sans-serif;  
    text-align: center;  
}
```

```
#data-container {  
    border: 1px solid #ccc;  
    padding: 20px;  
    margin: 20px auto;  
    max-width: 300px;  
}
```

#### 4. Implement Real-Time Data Display with JavaScript:

- Use JavaScript to fetch and update real-time data from your IoT devices. In this example, we'll simulate real-time data updates.

html

```
<!-- Add this within the HTML file, below the </body> tag -->  
<script src="script.js"></script>
```

javascript

```
// script.js  
  
const temperatureElement = document.getElementById("temperature");  
const humidityElement = document.getElementById("humidity");  
  
function updateData() {  
    // Simulate fetching real-time data from your IoT devices  
    const temperature = getRandomValue(15, 30);  
    const humidity = getRandomValue(40, 80);
```

```
temperatureElement.textContent = temperature.toFixed(2);
humidityElement.textContent = humidity.toFixed(2);

setTimeout(updateData, 2000); // Update data every 2 seconds
}

function getRandomValue(min, max) {
    return Math.random() * (max - min) + min;
}

updateData(); // Start the real-time data update process
```

#### 5. Serve the Web Application:

- Start a web server (e.g., using Python or Node.js) to serve the HTML, CSS, and JavaScript files.

```
bash
```

```
python -m http.server
```

#### 6. Access the Platform:

- Open a web browser and navigate to <http://localhost:8000> (or the address provided by your web server).

You now have a simple web application that displays real-time temperature and humidity data. In a real-world scenario, you would replace the simulated data with data fetched from your IoT devices. Additionally, consider using a framework like React, Vue, or Angular for more complex applications and improved user experience. Don't forget to secure the data transmission and user authentication for a production-ready platform.