**CODING**

* **HTML Structure:**

html

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Weather Dashboard</title>

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

</head>

<body>

<div class="container">

<h1>Weather Dashboard</h1>

<input type="text" id="city-input" placeholder="Enter city name" />

<button onclick="getWeather()">Get Weather</button>

<div id="weather-info" class="weather-info"></div>

<p id="error-message" class="error"></p>

</div>

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

</body>

</html>

* **styles.css:**

body {

font-family: Arial, sans-serif;

background-color: #f0f0f0;

margin: 0;

padding: 0;

display: flex;

justify-content: center;

align-items: center;

height: 100vh;

}

.container {

text-align: center;

background-color: white;

border-radius: 10px;

padding: 40px;

box-shadow: 0 4px 10px rgba(0, 0, 0, 0.1);

}

input[type="text"] {

padding: 10px;

margin: 20px 0;

width: 250px;

border-radius: 5px;

border: 1px solid #ccc;

}

button {

padding: 10px 20px;

background-color: #4CAF50;

color: white;

border: none;

border-radius: 5px;

cursor: pointer;

}

button:hover {

background-color: #45a049;

}

.weather-info {

margin-top: 20px;

}

.error {

color: red;

* **JavaScript Logic (app.js):**

async function getWeather() {

const city = document.getElementById('city-input').value;

const apiKey = 'your-api-key'; // Replace with your actual API key

const url = `https://api.openweathermap.org/data/2.5/weather?q=${city}&appid=${apiKey}&units=metric`;

try {

const response = await fetch(url);

const data = await response.json();

if (data.cod !== 200) {

document.getElementById('error-message').innerText = "City not found. Please try again.";

document.getElementById('weather-info').innerHTML = '';

} else {

const weatherData = `

<h3>${data.name}</h3>

<p><img src="http://openweathermap.org/img/wn/${data.weather[0].icon}.png" alt="${data.weather[0].description}"></p>

<p><strong>${data.main.temp}°C</strong></p>

<p>${data.weather[0].description}</p>

<p>Humidity: ${data.main.humidity}%</p>

<p>Wind Speed: ${data.wind.speed} m/s</p>

`;

document.getElementById('weather-info').innerHTML = weatherData;

document.getElementById('error-message').innerText = ''; // Clear error message

}

} catch (error) {

document.getElementById('error-message').innerText = "Error fetching weather data.";

document.getElementById('weather-info').innerHTML = '';

}

}