

Major Academor Weather project

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">
```

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

```
<script src="https://cdn.jsdelivr.net/npm/axios/dist/axios.min.js"></script>
```

```
<script src="https://cdn.jsdelivr.net/npm/chart.js"></script>
```

```
<style>
```

```
body {
```

```
  font-family: 'Arial', sans-serif;
```

```
  margin: 0;
```

```
  display: flex;
```

```
  align-items: center;
```

```
  justify-content: center;
```

```
  height: 100vh;
```

```
  width: 100vw;
```

```
}
```

```
.container {
```

```
  text-align: center;
```

```
  background-color: rgba(148, 150, 148, 0.7);
```

```
  padding: 20px;
```

```
  border-radius: 10px;
```

```
}
```

```
input {
```

```
  padding: 8px;
```

```
}
```

```
button {
```

```
padding: 8px 16px;
margin-top: 8px;
cursor: pointer;
}
```

```
#currentWeather {
margin-top: 20px;
}
```

```
#forecast {
margin-top: 20px;
display: flex;
justify-content: space-around;
}
```

```
.day {
flex: 1;
text-align: center;
margin: 10px;
padding: 10px;
border: 1px solid #fff;
border-radius: 5px;
}
```

```
canvas {
max-width: 100%;
width: 300px; /* Adjust the width as needed */
height: auto;
}
```

```
</style>
```

```
<title>Weather Forecast App</title>
```

```
</head>

<body>

  <div class="container">

    <label for="cityInput">Enter City:</label>

    <input type="text" id="cityInput" placeholder="Type city name" value="Delhi">

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

    <div id="currentWeather"></div>

    <div id="forecast"></div>

  </div>

  <script>

    const apiKey = '5eedb53da4e31c68c045887c10d842be';
    const defaultCity = 'Delhi';
    const apiUrl = 'https://api.openweathermap.org/data/2.5/forecast';

    async function getWeather() {

      const cityInput = document.getElementById('cityInput');
      const cityName = cityInput.value || defaultCity;

      try {

        const response = await axios.get(`${apiUrl}?q=${cityName}&appid=${apiKey}&units=metric`);
        const data = response.data;

        if (response.status === 200) {
          displayCurrentWeather(data);
          displayWeatherForecast(data);
        } else {
          console.error('Error fetching weather data:', data?.message || 'Unknown error');
        }
      } catch (error) {
        console.error('Error fetching weather data:', error.message);
      }
    }
  }
</script>
</body>
</html>
```

```
}
```

```
function displayCurrentWeather(data) {  
  const currentWeatherDiv = document.getElementById('currentWeather');  
  currentWeatherDiv.innerHTML = `  
    <h2>Current Weather in ${data.city.name}</h2>  
    <p>Temperature: ${data.list[0].main.temp}°C</p>  
    <p>Humidity: ${data.list[0].main.humidity}%</p>  
    <p>Wind Speed: ${data.list[0].wind.speed} m/s</p>  
    <p>Weather Condition: ${data.list[0].weather[0].description}</p>  
  `;  
}
```

```
function displayWeatherForecast(data) {  
  const forecastDiv = document.getElementById('forecast');  
  forecastDiv.innerHTML = "";  
  
  for (let i = 0; i < data.list.length && i < 6 * 8; i += 8) {  
    const dayData = data.list[i];  
    const date = new Date(dayData.dt * 1000);  
    const dayDiv = document.createElement('div');  
    dayDiv.className = 'day';  
  
    let chartCanvas = document.createElement('canvas');  
    chartCanvas.id = `weatherChart${i}`;  
    chartCanvas.width = 300;  
    chartCanvas.height = 200;  
  
    dayDiv.innerHTML = `  
      <p>${date.toDateString()}</p>  
      <p>Temperature: ${dayData.main.temp}°C</p>
```

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

```
<p>Weather Condition: ${dayData.weather[0].description}</p>
```

```
`;
```

```
dayDiv.appendChild(chartCanvas);
```

```
forecastDiv.appendChild(dayDiv);
```

```
drawCombinedChart(weatherChart${i}, dayData.main.temp, dayData.main.humidity);
```

```
}
```

```
}
```

```
function drawCombinedChart(canvasId, tempData, humidityData) {
```

```
  const ctx = document.getElementById(canvasId).getContext('2d');
```

```
  new Chart(ctx, {
```

```
    type: 'bar',
```

```
    data: {
```

```
      labels: ['Temperature', 'Humidity'],
```

```
      datasets: [{
```

```
        label: 'Temperature (°C)',
```

```
        data: [tempData],
```

```
        backgroundColor: 'rgba(255, 0, 0, 0.5)',
```

```
        borderColor: 'rgba(255, 0, 0, 1)',
```

```
        borderWidth: 2,
```

```
      }, {
```

```
        label: 'Humidity (%)',
```

```
        data: [humidityData],
```

```
        backgroundColor: 'rgba(0, 0, 255, 0.5)',
```

```
        borderColor: 'rgba(0, 0, 255, 1)',
```

```
        borderWidth: 2,
```

```
    ]
```

```
    },  
    options: {  
      scales: {  
        y: {  
          beginAtZero: true  
        }  
      }  
    }  
  });  
}
```

```
    getWeather();  
  </script>  
</body>  
</html>
```