

----index.html----

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Weather App Project JavaScript </title>

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

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

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

</head>

<body>

<h1>Weather Dashboard</h1>

<div class="container">

<div class="weather-input">

<h3>Enter a City Name</h3>

<input class="city-input" type="text" placeholder="Enter Place">

<button class="search-btn">Search</button>

<div class="separator"></div>

<button class="location-btn">Use Current Location</button>

</div>

<div class="weather-data">

<div class="current-weather">

<div class="details">

<h2>_____ (_____)</h2>

<h6>Temperature: __°C</h6>

<h6>Wind: __ M/S</h6>

<h6>Humidity: __%</h6>

</div>

</div>

<div class="days-forecast">

<h2>5-Day Forecast</h2>

<ul class="weather-cards">

<li class="card">

<h3>(_____)</h3>

<h6>Temp: __C</h6>

<h6>Wind: __ M/S</h6>

<h6>Humidity: __%</h6>

<li class="card">

```

    <h3>( _____ )</h3>
    <h6>Temp: __C</h6>
    <h6>Wind: __ M/S</h6>
    <h6>Humidity: __%</h6>
</li>
<li class="card">
    <h3>( _____ )</h3>
    <h6>Temp: __C</h6>
    <h6>Wind: __ M/S</h6>
    <h6>Humidity: __%</h6>
</li>
<li class="card">
    <h3>( _____ )</h3>
    <h6>Temp: __C</h6>
    <h6>Wind: __ M/S</h6>
    <h6>Humidity: __%</h6>
</li>
<li class="card">
    <h3>( _____ )</h3>
    <h6>Temp: __C</h6>
    <h6>Wind: __ M/S</h6>
    <h6>Humidity: __%</h6>
</li>
</ul>
</div>
</div>
</div>

```

```

</body>
</html>

```

-----style.css-----

```

/* Import Google font - Open Sans */
@import url('https://fonts.googleapis.com/css2?
family=Open+Sans:wght@400;500;600;700&display=swap');
* {
margin: 0;
padding: 0;
box-sizing: border-box;

```

```
font-family: 'Open Sans', sans-serif;
}
body {
  background: #E3F2FD;
}
h1 {
  background: #5372F0;
  font-size: 1.75rem;
  text-align: center;
  padding: 18px 0;
  color: #fff;
}
.container {
  display: flex;
  gap: 35px;
  padding: 30px;
}
.weather-input {
  width: 550px;
}
.weather-input input {
  height: 46px;
  width: 100%;
  outline: none;
  font-size: 1.07rem;
  padding: 0 17px;
  margin: 10px 0 20px 0;
  border-radius: 4px;
  border: 1px solid #ccc;
}
.weather-input input:focus {
  padding: 0 16px;
  border: 2px solid #5372F0;
}
.weather-input .separator {
  height: 1px;
  width: 100%;
  margin: 25px 0;
  background: #BBBBBB;
  display: flex;
  align-items: center;
```

```
    justify-content: center;
}
.weather-input .separator::before{
    content: "or";
    color: #6C757D;
    font-size: 1.18rem;
    padding: 0 15px;
    margin-top: -4px;
    background: #E3F2FD;
}
.weather-input button {
    width: 100%;
    padding: 10px 0;
    cursor: pointer;
    outline: none;
    border: none;
    border-radius: 4px;
    font-size: 1rem;
    color: #fff;
    background: #5372F0;
    transition: 0.2s ease;
}
.weather-input .search-btn:hover {
    background: #2c52ed;
}
.weather-input .location-btn {
    background: #6C757D;
}
.weather-input .location-btn:hover {
    background: #5c636a;
}
.weather-data {
    width: 100%;
}
.weather-data .current-weather {
    color: #fff;
    background: #5372F0;
    border-radius: 5px;
    padding: 20px 70px 20px 20px;
    display: flex;
    justify-content: space-between;
```

```
}  
.current-weather h2 {  
  font-weight: 700;  
  font-size: 1.7rem;  
}  
.weather-data h6 {  
  margin-top: 12px;  
  font-size: 1rem;  
  font-weight: 500;  
}  
.current-weather .icon {  
  text-align: center;  
}  
.current-weather .icon img {  
  max-width: 120px;  
  margin-top: -15px;  
}  
.current-weather .icon h6 {  
  margin-top: -10px;  
  text-transform: capitalize;  
}  
.days-forecast h2 {  
  margin: 20px 0;  
  font-size: 1.5rem;  
}  
.days-forecast .weather-cards {  
  display: flex;  
  gap: 20px;  
}  
.weather-cards .card {  
  color: #fff;  
  padding: 18px 16px;  
  list-style: none;  
  width: calc(100% / 5);  
  background: #6C757D;  
  border-radius: 10px;  
}  
.weather-cards .card h3 {  
  font-size: 1.3rem;  
  font-weight: 600;  
}
```

```
.weather-cards .card img {  
  max-width: 70px;  
  margin: 5px 0 -12px 0;  
}
```

```
@media (max-width: 1400px) {  
  .weather-data .current-weather {  
    padding: 20px;  
  }  
  .weather-cards {  
    flex-wrap: wrap;  
  }  
  .weather-cards .card {  
    width: calc(100% / 4 - 15px);  
  }  
}
```

```
@media (max-width: 1200px) {  
  .weather-cards .card {  
    width: calc(100% / 3 - 15px);  
  }  
}
```

```
@media (max-width: 950px) {  
  .weather-input {  
    width: 450px;  
  }  
  .weather-cards .card {  
    width: calc(100% / 2 - 10px);  
  }  
}
```

```
@media (max-width: 750px) {  
  h1 {  
    font-size: 1.45rem;  
    padding: 16px 0;  
  }  
  .container {  
    flex-wrap: wrap;  
    padding: 15px;  
  }  
  .weather-input {  
    width: 100%;  
  }  
}
```

```
.weather-data h2 {
  font-size: 1.35rem;
}
}
```

----script.js----

```
const cityInput = document.querySelector(".city-input");
const searchButton = document.querySelector(".search-btn");
const locationButton = document.querySelector(".location-btn");
const currentWeatherDiv = document.querySelector(".current-weather");
const weatherCardsDiv = document.querySelector(".weather-cards");

const API_KEY = "a37a2db9e4e740747478ce639455db08"; // API key for OpenWeatherMap API

const createWeatherCard = (cityName, weatherItem, index) => {
  if(index === 0) { // HTML for the main weather card
    return `<div class="details">
      <h2>${cityName} (${weatherItem.dt_txt.split(" ")[0]})</h2>
      <h6>Temperature: ${weatherItem.main.temp - 273.15}.toFixed(2)}°C</h6>
      <h6>Wind: ${weatherItem.wind.speed} M/S</h6>
      <h6>Humidity: ${weatherItem.main.humidity}%</h6>
    </div>
    <div class="icon">
      
      <h6>${weatherItem.weather[0].description}</h6>
    </div>`;
  } else { // HTML for the other five day forecast card
    return `<li class="card">
      <h3>(${weatherItem.dt_txt.split(" ")[0]})</h3>
      
      <h6>Temp: ${weatherItem.main.temp - 273.15}.toFixed(2)}°C</h6>
      <h6>Wind: ${weatherItem.wind.speed} M/S</h6>
      <h6>Humidity: ${weatherItem.main.humidity}%</h6>
    </li>`;
  }
}
```

```

const getWeatherDetails = (cityName, latitude, longitude) => {
  const WEATHER_API_URL = `https://api.openweathermap.org/data/2.5/forecast?lat=${latitude}&lon=${longitude}&appid=${API_KEY}`;

  fetch(WEATHER_API_URL).then(response => response.json()).then(data => {
    // Filter the forecasts to get only one forecast per day
    const uniqueForecastDays = [];
    const fiveDaysForecast = data.list.filter(forecast => {
      const forecastDate = new Date(forecast.dt_txt).getDate();
      if (!uniqueForecastDays.includes(forecastDate)) {
        return uniqueForecastDays.push(forecastDate);
      }
    });

    // Clearing previous weather data
    cityInput.value = "";
    currentWeatherDiv.innerHTML = "";
    weatherCardsDiv.innerHTML = "";

    // Creating weather cards and adding them to the DOM
    fiveDaysForecast.forEach((weatherItem, index) => {
      const html = createWeatherCard(cityName, weatherItem, index);
      if (index === 0) {
        currentWeatherDiv.insertAdjacentHTML("beforeend", html);
      } else {
        weatherCardsDiv.insertAdjacentHTML("beforeend", html);
      }
    });
  }).catch(() => {
    alert("An error occurred while fetching the weather forecast!");
  });
}

const getCityCoordinates = () => {
  const cityName = cityInput.value.trim();
  if (cityName === "") return;
  const API_URL = `https://api.openweathermap.org/geo/1.0/direct?q=${cityName}&limit=1&appid=${API_KEY}`;

  // Get entered city coordinates (latitude, longitude, and name) from the API response

```



```

fetch(API_URL).then(response => response.json()).then(data => {
  if (!data.length) return alert(`No coordinates found for ${cityName}`);
  const { lat, lon, name } = data[0];
  getWeatherDetails(name, lat, lon);
}).catch(() => {
  alert("An error occurred while fetching the coordinates!");
});
}

const getUserCoordinates = () => {
  navigator.geolocation.getCurrentPosition(
    position => {
      const { latitude, longitude } = position.coords; // Get coordinates of user location
      // Get city name from coordinates using reverse geocoding API
      const API_URL = `https://api.openweathermap.org/geo/1.0/reverse?lat=${latitude}&lon=${longitude}&limit=1&appid=${API_KEY}`;
      fetch(API_URL).then(response => response.json()).then(data => {
        const { name } = data[0];
        getWeatherDetails(name, latitude, longitude);
      }).catch(() => {
        alert("An error occurred while fetching the city name!");
      });
    },
    error => { // Show alert if user denied the location permission
      if (error.code === error.PERMISSION_DENIED) {
        alert("Geolocation request denied. Please reset location permission to grant access again.");
      } else {
        alert("Geolocation request error. Please reset location permission.");
      }
    }
  );
}

```

```

locationButton.addEventListener("click", getUserCoordinates);
searchButton.addEventListener("click", getCityCoordinates);
cityInput.addEventListener("keyup", e => e.key === "Enter" && getCityCoordinates());

```