

# Weather App Documentation

A weather application to search for current weather and a 5day forecast for any city. It also provides an option to use the user's current location and maintains a list of recent searches.

## Technologies

- HTML
- CSS (TailwindCSS)
- JavaScript
- OpenWeatherMap API

## Code Structure

### HTML

- Header: App title and navigation.
- Main:
  - City input, search button, and current location button.
  - Recent searches dropdown.
  - Current weather and 5day forecast sections.
- Footer: Contact information and social media links.

## JavaScript

### Event Listeners:

For search and location buttons.

### Functions:

- `getWeatherData(inputCity)`: Fetches weather data for a city.
- `displayWeatherData(data)`: Displays current weather.
- `getExtendedForecast(lat, lon)`: Fetches 5day forecast.
- `displayExtendedForecast(data)`: Displays the forecast.
- `addRecentSearch(city)`: Adds a city to recent searches.
- `updateRecentSearchesDropdown()`: Updates the dropdown.
- `getWeatherDataByCoords(lat, lon)`: Fetches weather by coordinates.

## CSS

Uses TailwindCSS for styling.

## Challenges

- API Integration: Handling different API responses.
- LocalStorage: Saving and updating recent searches.
- Geolocation: Fetching and using the current location.
- Responsive Design: Ensuring the app looks good on all devices.
- DOM Manipulation: Updating the UI dynamically based on user interactions and API responses.
- Dropdown  
Error Handling

## Conclusion

This weather app is a practical implementation of API usage, localStorage, geolocation, and responsive design, providing a user-friendly interface for weather information.

## GitHub Link:

[https://github.com/Ashmita2282/weather\\_application](https://github.com/Ashmita2282/weather_application)