

ZOBLIK Technologies

Assignment: Build a Weather Finder App Using OpenWeatherMap API

Objective:

Create a weather application that allows users to search for current weather information by entering a city name. The app should display key weather details such as temperature, conditions, humidity, and wind speed using the OpenWeatherMap API.

Instructions

1. Project Setup:

- Install [Node.js](#) and npm if they are not already installed on your system.
- Create a new React.js project using create-react-app.
- Organize your project folder and verify that the app runs successfully using npm start.

2. Get Your OpenWeatherMap API Key:

- Sign up on [OpenWeatherMap](#) to create a free account.
- Obtain a free API key to use in your application.

3. Build the App Structure:

- Create a form with an input field where users can enter a city name.
- Set up components to display weather details, including:
 - City name
 - Current temperature
 - Weather description (e.g., sunny, cloudy)
 - Humidity level
 - Wind speed

4. API Integration:

- Use the OpenWeatherMap API to fetch weather data based on the city input by the user.
- Send an API request using the metric system (for temperatures in Celsius).

5. Handle API Responses:

- Display the weather details for the searched city.
- Implement error handling for various scenarios, such as:
 - Invalid city name (e.g., show "City not found" message).

- API or connectivity errors (e.g., show a generic error message).

6. Styling the App:

- Use CSS, Bootstrap, or any styling framework to design a user-friendly interface.
- Ensure the app is responsive and works seamlessly on mobile and desktop devices.

7. Bonus Features (Optional):

- Add icons corresponding to different weather conditions.
- Display a 3-day weather forecast for the city.
- Provide a toggle option for users to switch between Celsius and Fahrenheit.
- Use React state management (e.g., useState) to manage user inputs and weather data.

8. Testing:

- Test the application thoroughly to ensure it correctly displays data for various city names.
- Check error handling by entering incorrect city names or disconnecting from the internet.

Submission Guidelines:

Deadline:

- Complete and submit the project within 1 day.

Deliverables:

1. Source Code:

- Share the complete source code of your weather application.

2. Demo Video:

- Provide a short video demonstrating the app's functionality, including successful searches and error handling.

3. README.md File:

- Include clear instructions on setting up and running the app locally.

Note – Do not use ai or cheat from internet.

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