

Weather Forecast Application

Project Overview

The Weather Forecast Application is a web-based tool that allows users to fetch and display current weather information for any city worldwide. The application uses the OpenWeatherMap API to get real-time weather data and presents it in a user-friendly interface.

Features

- Search for current weather by city name.
- Display temperature in Celsius.
- Show additional weather details such as humidity, wind speed, and weather description.
- Responsive design for various screen sizes.

Technologies Used

- **HTML:** For the structure of the application.
- **CSS:** For styling the application.
- **JavaScript:** For handling user interactions and API requests.
- **OpenWeatherMap API:** To fetch weather data.

Getting Started

Prerequisites

- A modern web browser (e.g., Chrome, Firefox, Edge).
- An API key from OpenWeatherMap.

Installation

1. Clone the repository or download the project files.
2. Open the weatherforecast.html file in a web browser.

Configuration

1. **Obtain an API Key:** Sign up at OpenWeatherMap and obtain a free API key.
2. **Set the API Key:**
 1. Open weatherforecast.html and place the API key in script tag.
 2. Replace 'YOUR_API_KEY' with your actual OpenWeatherMap API key.

How to Use

1. **Open the Application:** Open the weatherforecast.html file in a web browser.
2. **Enter a City Name:** Type the name of the city you want to check the weather for in the input field.
3. **Search for Weather:** Click the "Search" button.
4. **View Weather Information:** The weather information for the specified city will be displayed below the search bar.

Future Improvements

- Add a 5-day weather forecast.

- Provide additional weather details such as sunrise and sunset times.
- Improve error handling and user feedback.
- Enhance the UI/UX with better styling and animations.

Conclusion

This documentation provides a comprehensive overview of the Weather Forecast Application, including its features, technologies used, and instructions for setting up and using the application. With this guide, you should be able to understand and extend the application as needed.