**Quality and Clarity of the Code:**

I structured the code following best practices and coding conventions. Descriptive variable names enhance code readability, while comments provide additional clarity where necessary. The code gracefully handles errors and edge cases, offering user-friendly feedback in case of invalid input or API failures.

Short Write-Up Explaining the Choice of API and Challenges Encountered:

I chose the OpenWeatherMap API due to its simplicity, reliability, and availability of a suitable free tier. The application functions smoothly, offering accurate weather data for specified cities. Users can interact effortlessly by entering a city name and clicking the submit button to receive weather updates. The displayed information is presented in a readable format, ensuring ease of interpretation.  
  
Effective Use of the Chosen API: I integrated the OpenWeatherMap API into the application to fetch weather data based on user input. Leveraging the API's endpoints, the application retrieves real-time weather information such as temperature, sky conditions, and wind speed, presenting it in a clear and concise manner.

Creativity and Originality of the Application Concept:

I designed this application to be a simple and intuitive weather information tool, allowing users to quickly retrieve current weather data for any city. The interface is user-friendly, providing a seamless experience for accessing weather updates without unnecessary complexity.

Short Write-Up Explaining the Choice of API and Challenges Encountered:

I chose the OpenWeatherMap API due to its simplicity, reliability, and availability of a suitable free tier. During development, one challenge I encountered was handling errors and edge cases, such as invalid city names or API request failures. However, I addressed these challenges by implementing robust error handling mechanisms and user-friendly feedback systems.

Demonstration of Functionality with Examples:

Example:

I entered "New York" in the city input field.

I click the submit button.

The application fetches weather data for New York from the OpenWeatherMap API.

The current weather conditions for New York, including temperature, sky conditions, and wind speed, are displayed.

I receive instant weather updates for the specified city.

Overall, the application provides a seamless and efficient way to access weather information, demonstrating effective use of API integration and user interface design principles.  
  
Repositiory   
<https://github.com/DawitZebro/assignments.git>