Task: Weather Dashboard Development

Objective:
Create a responsive weather dashboard that allows users to search for weather information by city. The dashboard should display real-time weather data and handle errors gracefully.

Requirements:

1. **HTML Structure:**
   - Implement a search bar for users to input a city name.
   - Display the following weather information:
     - Temperature
     - Humidity
     - Wind Speed
     - Weather Icon
     - Timestamp for the last updated time
   - Include an area to show error messages if the city is not found.
2. **CSS Styling:**
   - Style the dashboard to achieve a modern and clean look.
   - Use distinct sections for each piece of information (e.g., temperature, humidity).
   - Ensure the design is responsive for both mobile and desktop views.
   - Utilize colors or icons to indicate weather conditions (e.g., sun icon for sunny weather, cloud icon for cloudy weather).
3. **JavaScript Functionality:**
   - **API Integration:** Use a weather API like OpenWeatherMap or WeatherAPI to fetch real-time weather data.
   - **Real-Time Search:** Fetch and display weather data for the city entered in the search bar.
   - **Error Handling:** Implement user-friendly error messages for invalid city entries or API issues.
   - **(Optional) Automatic Refresh:** Set up automatic refreshing of weather data every 5 minutes.
   - **(Optional) Background Change:** Display a background image or color that changes based on the weather conditions.
4. **Deployment:**
   - Host the project on a platform like Netlify, Firebase, or Heroku.
   - Ensure the GitHub repository is public and share the link.

Deliverables:

- A zip file containing the HTML, CSS, and JavaScript files.
- A link to the live deployed application.
- A link to the public GitHub repository.

Deadline:

15-11-2024

Note: This task is an excellent opportunity to work with APIs, handle asynchronous data, and implement real-time updates.