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Completed the project named as : Phase 1 : Live Weather Dashboard

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Abstract :

- The **Live Weather Dashboard** is a responsive web application that provides users with real-time weather data based on their location or selected cities.
- It will feature current temperature, weather conditions, humidity, wind speed, and a 5-day forecast.
- The goal is to deliver an intuitive interface and useful weather insights for daily decision-making, travel planning, and safety.

Users and Stakeholders

Users :

- **General Users:** Individuals checking daily weather updates.
- **Travelers:** People planning trips and needing weather information.
- **Commuters:** Checking conditions for travel decisions.
- **Outdoor Workers:** Relying on weather for job planning (e.g., construction, farming).

Stakeholders :

- **Product Owner**
- **Design Team**
- **Development Team**
- **QA/Testers**
- **Marketing Team**

User Stories :

As a user, I want to :

- View current weather conditions for my location.
- Search for weather information in other cities.
- See a 5-day forecast for a selected location.
- View detailed metrics (temperature, humidity, wind, etc.).
- Toggle between Celsius and Fahrenheit.
- Save favorite cities for quick access (Optional/Stretch Goal).

MVP Features :

- Auto-detect user's location via geolocation.
- Display current weather (temp, description, icon, etc.).
- Search weather by city name.
- 5-day forecast display.
- Toggle between °C / °F.
- Responsive design for mobile and desktop.
- Error handling (e.g., "City not found").
- Loading state while fetching data.

API Endpoint List :

Endpoints (example: OpenWeatherMap):

- GET /weather?q={city name}&units=metric&appid={API key}
→ Get current weather by city
- GET /weather?lat={lat}&lon={lon}&units=metric&appid={API key}
→ Get current weather by geolocation
- GET /forecast?q={city name}&units=metric&appid={API key}
→ 5-day forecast
- GET /onecall?lat={lat}&lon={lon}&exclude=minutely,hourly,alerts&appid={API key}
→ (Optional) More detailed forecast

Acceptance Criteria :

Feature

- Location-based weather
- City search
- Current weather display
- Forecast
- Temperature unit toggle
- Error handling
- Responsive layout
- API integration

Acceptance Criteria

- Detects user location and displays current weather
- Users can input and search for any city; valid input returns weather info
- Displays temp, weather condition, humidity, wind speed, and icon
- Shows 5-day forecast with day name, min/max temp, icon
- Users can switch between Celsius and Fahrenheit
- If city is not found, displays user-friendly error
- Works smoothly on desktop, tablet, and mobile
- Weather data is pulled from a real-time weather API