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1) Project Description

This project will develop a comprehensive weather application that not only provides real-time weather updates and forecasts but also integrates health recommendations as an added service. The app will offer detailed weather information, including temperature, humidity, precipitation, and air quality index, sourced from reliable APIs like OpenWeatherMap. For users interested in health insights, the app will deliver personalized recommendations, such as advising on the best times for outdoor activities or cautioning against high pollen levels for allergy sufferers. User authentication via Google accounts will enable personalized alerts and suggestions, enhancing user engagement with both weather and health-oriented features.

2) Product Requirements

- **Goal:** To create a leading weather application that offers detailed forecasts and personalized health recommendations as a supplementary feature.
- **Non-Goal:** To predict future health conditions or provide medical advice beyond environmental impact suggestions.
- **Non-Functional Requirement 1: Scalability**
    - Functional Requirements:
        1. Ensure the application can handle many simultaneous user requests without degradation of performance.
        2. Design the system to easily integrate additional data sources or APIs in the future without major overhauls.
- **Non-Functional Requirement 2: Usability**
    - Functional Requirements:
        1. Design an intuitive and user-friendly interface that allows users to easily navigate the dashboard and understand their health recommendations.
        2. Implement a user profile system that tailors alerts and suggestions, such as air quality and activity recommendations, based on individual health concerns.

3) Project Management

- **Theme:** Enhancing daily life with actionable weather insights and health advisories.
- **Epic:** Weather App with Integrated Health Features
- **User Story 1:** As a user, I want to get accurate and detailed weather forecasts to plan my day.
    - **Task:** Implement comprehensive weather data display.
        - **Ticket 1: Integrate Weather Data API**

        - Research and integrate OpenWeatherMap API to fetch and display real-time weather data.

    - **Ticket 2: Weather Forecast UI Design**
        - Design and implement a user interface that clearly presents weather forecasts, including hourly and weekly predictions.

- **User Story 2:** As a user concerned about air quality, I want to receive health recommendations based on current environmental conditions.
    - **Task:** Add health recommendation features based on weather and air quality.
        - **Ticket 1: Air Quality Data Integration**
            - Integrate an air quality API to provide real-time air quality index readings alongside weather information.
        - **Ticket 2: Health Recommendation System**
            - Develop a feature to offer health recommendations, such as optimal times for outdoor activities or alerts on high pollen days, based on the weather and air quality data.