Project Description

A user-friendly web app that allows users to make an account and log in using Google OAuth and input the place and time of a trip they are planning to take. The app will use a weather API, along with Eventbrite and Yelp/TripAdvisor API, to retrieve and provide information about the weather during their trip and offer events and attractions that are appropriate for that weather. For instance, on a warm and sunny day the app would display outdoor activities and on a cold or rainy day it would suggest indoor activities. Users can save their trips and the corresponding event information to an itinerary and will be able to repeat this process for multiple trips.

Product Requirements

- **Goal:** Create a simple web app that allows users to input a travel destination along with dates and receive information about the weather and events/attractions in order to help them plan their trip.
- **Nongoal:** Recommending specific events based on user interests or likes/dislikes.
- **Non-Functional Requirement:** Security
    - **Functional Requirements:**
        1. Use Google login with OAuth authentication
        2. Securely store API keys in local files and do not push them to github
- **Non-Functional Requirement:** Repeatability
    - **Functional Requirements:**
        1. Previous trip searches and their itineraries will be stored locally
        2. Once the user has saved their itinerary, they can return to the beginning screen and their account will be updated accordingly

Project Management

- **Theme:** Support the user with their travel planning by providing weather information and appropriate event ideas for a specified location.
- **Epic:** Activity/Event Itinerary Creation
- **User Story 1:** As a user planning a trip, I want to be able to find events that align with and are appropriate for the local weather.
    - **Task:** Integrate weather and event APIs
        - **Ticket 1:** Obtain weather information for a given location using a weather API (likely OpenWeatherMap but there are many). Display this information for the user as well as store the data to be used in correspondence with the event API.
        - **Ticket 2:** Obtain event/activity information for the location based on the weather data. This part should filter out unsuitable events according to the current weather. For example, poor weather conditions should result in suggesting indoor activities while a sunny day should lead to outdoor event suggestions.

- **User Story 2:** As a repeat user, I want to be able to store my travel plans to reference them later.
    - **Task:** Manage user itineraries
        - **Ticket 1:** Create an appropriate relational database (likely using SQLite) that will, for a given user, store that user's previously explored locations and associated weather conditions & event ideas.
        - **Ticket 2:** Implement itinerary management features in the form of CRUD operations to allow users to manage their itineraries. These operations should be visually appealing and user-friendly.