1. **Project Title:** TravelEase: Smart Travel Itinerary & Expense Tracker

2. **Project Summary**

   TravelEase is a web application designed to help users plan, organize, and track their travel expenses. It enables users to create detailed itineraries, store trip-related bookings, categorize travel expenses, and generate spending reports. We essentially want to make a way for users to manage all aspects of their travel in one centralized location, from creating and editing entries to updating and deleting them as needed.

   With the rise in individuals and families traveling for work, leisure, and study abroad programs, keeping track of multiple bookings, expenses, and budgets can be overwhelming. Existing travel apps focus on either itinerary planning or expense tracking, but not everything in one place. TravelEase is essentially everything in one place, so it allows users to manage their itinerary and keep track of their finances.

3. **Application Description**

   When traveling, people often find it stressful to keep track of flight details, hotel reservations, activity schedules, and expenses in one place. Budgeting for a trip can also be challenging, especially when we are trying to keep track of different currencies.

   Our solution? TravelEase!

   TravelEase is a centralized travel dashboard where users can:

   - Store all trip details (flights, hotels, activities) in one place.
   - Categorize expenses into accommodation, food, transport, activities, and shopping.
   - Generate real-time spending reports for travel budgeting.
   - Share trips with friends/family for collaborative trip planning.

   With these features, TravelEase simplifies travel management and helps users budget efficiently while enjoying their trip!

4. **Creative Component**

   A creative component that would enhance the application's functionality is a dynamic currency conversion system. This feature would integrate real-time exchange rate data from the FreecurrencyAPI API. The system would fetch current exchange rates

periodically, and store this data in the database. It would apply this data to automatically convert user expenses entered in various local currencies to their home currency. To go even further, we could go beyond one-time conversions by tracking exchange rate fluctuations over the course of a trip, which is useful in seeing how currency changes impact a user's travel budget. This feature is useful in offering users a tool for managing their finances across multiple currencies during their travels.

5. **Usefulness**

This app is especially useful because it provides a variety of features that allow the user to not only manage their travel plans but also their expenses in an efficient manner. Users can create, edit, and delete trip details such as flights, hotels, and activities while also having the ability to add, update, categorize, and delete travel expenses. Additionally, the app generates spending reports that break down total expenses and categorize them by type, such as accommodation, food, and transportation. This allows users to track their travel budget more effectively and identify areas where they may be overspending too. We will also display these details in a structured format where users can see all their trip details, hotel stays and planned activities in one place. We also provide dynamic currency tracking- this could be especially useful if users are traveling to countries that use a currency different than theirs. By providing travel expense reports and smart budgeting recommendation ideas, we provide the user with an immersive travel experience.

There are other existing apps such as TripIt which helps users organize their itineraries but does not track expenses, Splitwise which tracks a user's expenses but doesn't store any trip details, and Google Travel which includes trip details but lacks the budgeting insights our app provides. In this way, we aim to provide a platform that combines itinerary planning with expense tracking and budgeting to really make your TravelEase!

6. **Realness**

Primary Data Sources:
https://www.kaggle.com/datasets/tharunprabu/my-expenses-data - contains records of individual financial transactions, capturing both income and expenses across various categories such as food, transportation, entertainment, and savings. The dataset, provided in CSV format, includes attributes like transaction date, amount, category, and payment method. It will be used to analyze spending patterns, categorize transactions, and generate financial insights.

https://www.kaggle.com/datasets/max-mind/world-cities-database - provides information on thousands of cities worldwide, including their names, country codes, latitude and longitude coordinates, and population estimates. This CSV dataset will be

used to incorporate location-based financial insights, such as comparing expenses across different cities, analyzing cost-of-living variations, and mapping financial transactions geographically.

7. Functionality (what the website will offer)

A user-friendly web app where users can:

- Create and manage trips (add/edit/ delete flights, hotels, activities).
- CRUD operations for expenses (add new expenses, view details, update expense information, delete expenses), trips, and user accounts
- Track and categorize travel expenses into categories like stay, food, entertainment, etc.
- View budget breakdowns with interactive graphs. This allows users to stay aligned with their predetermined budget goals.
- Use real-time currency conversion.
- Search and filter expenses based on categories, dates, or amounts
- Export trip reports for financial tracking. This allows users to keep track of their past expenses.

a. **A low-fidelity UI mockup:**
https://docs.google.com/presentation/d/1H2aE7bi2wzn0B6r978SM2uzr14jdwcXWQynRfsP-pbg/edit#slide=id.g3312d3d6735_0_0

b. **Project work distribution**
   i. Manya: Frontend UI/UX – Design and implement the user interface for trip management, expense tracking, and dashboard pages. Ensure responsiveness and integrate API calls.
   ii. Ranjana: Backend Development – Implement RESTful APIs for trip and expense management, handle authentication, and ensure secure data handling. Also work on frontend and backend integration.
   iii. Japjeev: Backend Development – Work with Ranjana to implement RESTful APIs for trip and expense management, handle authentication, and ensure secure data handling.
   iv. Sneha: Database & APIs – Set up the database schema, integrate real-time currency conversion, and implement data analysis features like budget reports and expense tracking.