

Project Design Phase
Problem – Solution Fit Template

Date	18 February 2026
Team ID	LTVIP2026TMIDS79519
Project Name	Travel Guide AI
Maximum Marks	2 Marks

Problem – Solution Fit Template:

Identified Problem

Manual travel planning is complex, time-consuming, and often overwhelming. Users must search across multiple platforms to gather information about attractions, food options, accommodations, and travel schedules. This scattered process reduces efficiency and increases planning stress.

Proposed Solution

To address this issue, an AI-based automated itinerary generator was developed. The system uses Generative AI to dynamically create personalized travel plans based on user inputs.

Fit Justification

The solution directly aligns with the identified problem by:

- Eliminating manual research efforts
- Providing instant, structured travel plans
- Personalizing recommendations based on user interests
- Reducing planning time significantly

Thus, the system effectively bridges the gap between traditional travel planning and intelligent automation.



Problem-Solution Fit Canvas – AI Travel Itinerary Generator

(Streamlit + Gemini API)



Problem Statement



CS

Travelers spend significant time searching multiple websites, blogs, or videos to plan their trips. Creating a personalized itinerary manually is time-consuming, and often confusing. There is a need for a simple AI-based system that can instantly generate customized travel plans based on user preferences.



Idea / Solution Description

CS

The proposed solution is a web-based AI Travel Itinerary Generator built using Streamlit and Google Gemini API.

- Users enter destination, number of days, and interests
- (e.g., food, adventure, beaches)
- The system uses generative AI to create a unique itinerary generation.



Idea / Solution Description

NU

- Generative AI for instant, personalized itineraries
- No login or account required for quick access and use
- Easy customization based on user interests



Idea / Solution Description

CS

Travelers need to spend significant time searching multiple platforms (websites, blogs, videos) to plan trips, leading to confusion and stress.

- Time-consuming manual research
- Scattered and incomplete information
- Difficulty in organizing personalized itineraries.



Social Impact / Customer Satisfaction

SI

- Saves time and reduces travel planning stress
- Makes travel planning accessible and simple for everyone.
- Encourages tourism exploration and supports local businesses
- Provides a user-friendly and stress-free travel planning experience



Business Model (Revenue Model)

BM

- Freemium model: Basic itinerary free, advanced features paid.
- Subscription model for premium features (budget planning, hotel suggestions)
- Affiliate marketing with hotels, airlines, and travel agencies.
- Advertisement-based revenue through targeted ads.



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Scalability of the Solution

SC

- Deployable on cloud platforms (AWS, Azure, Google Cloud)
- Supports multiple users simultaneously
- Easily extendable with features like PDF download, hotel booking, weather integration.



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