

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	17 February 2026
Team ID	LTVIP2026TMIDS79519
Project Name	Travel Guide AI
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Input Collection	Enter destination via text input Enter number of days Enter number of nights Enter travel interests
FR-2	AI Itinerary Generation	Generate personalized itinerary using Gemini API Create day-wise travel plan Include tourist attractions Include local food recommendations Include travel tips
FR-3	Itinerary Display	Display generated itinerary in readable format Show success message after generation Show loading spinner while generating
FR-4	Input Validation & Error Handling	Validate required fields (destination & interests) Show warning if fields are empty Handle API response errors gracefully

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Simple and user-friendly interface using Streamlit with clear input fields and buttons.
NFR-2	Security	Secure API key management and safe handling of user input. No sensitive data stored.
NFR-3	Reliability	System should consistently generate itineraries when valid input is provided.
NFR-4	Performance	Itinerary generation should complete within a few seconds depending on API response time.
NFR-5	Availability	Application should be accessible whenever the Streamlit server is running.
NFR-6	Scalability	System should handle multiple user requests and scale if deployed on cloud infrastructure.