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

Date	31 January 2025
Team ID	LTVIP2026TMIDS66282
Project Name	Explore With Ai: Custom Itineraries For Your Next Journey
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	Travel Itinerary Generation	• User can enter destination. • User can enter number of days. • User can enter number of nights. • System generates personalized travel itinerary using AI.
FR-2	Input Validation	• Validate that destination field is not empty. • Ensure number of days is greater than zero. • Ensure number of nights is zero or positive. • Display error message for invalid input.
FR-3	AI Model Integration	• Create structured prompt using user input. • Send prompt to generative AI model. • Receive generated itinerary from AI. • Format AI response properly.
FR-4	Output Display	• Display itinerary in readable format. • Allow user to review generated content. • Show appropriate error message if API fails.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The application should provide a simple, intuitive, and user-friendly interface using Streamlit.
NFR-2	**Security**	The API key must be securely configured and not exposed publicly. User input should not be stored permanently.
NFR-3	**Reliability**	The system should handle invalid inputs and API errors gracefully without crashing.
NFR-4	**Performance**	The application should generate travel itineraries within a reasonable response time.
NFR-5	**Availability**	The system should be accessible whenever the Streamlit server is running and internet connectivity is available.
NFR-6	**Scalability**	The system architecture should allow future enhancements such as budget-based customization and additional travel features.