

Project Design Phase Solution Architecture

| | |
|---------------|---|
| Date | 15 February 2025 |
| Team ID | LTVIP2026TMIDS91038 |
| Project Name | Explore with AI: Custom Itineraries for Your Next Journey |
| Maximum Marks | 4 Marks |

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.

Solution Architecture Diagram:

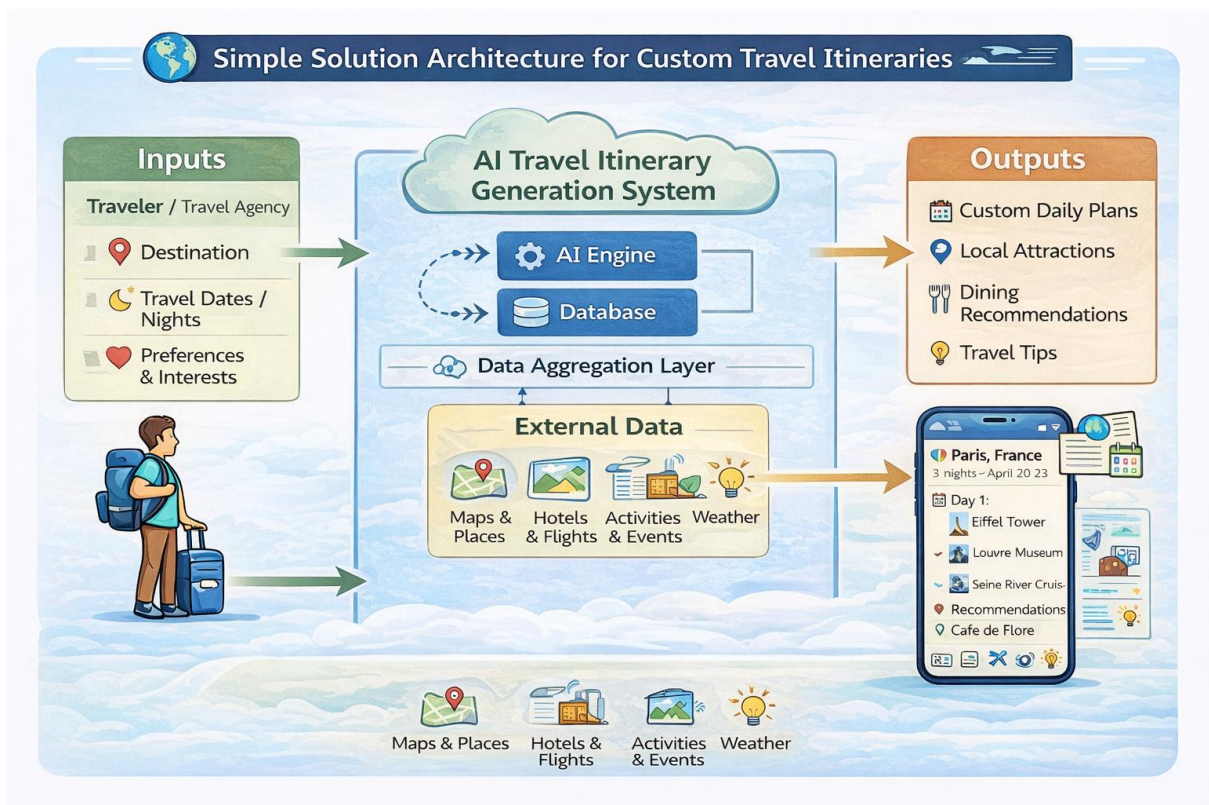


Figure 1: Explore with AI: Custom Itineraries for Your Next Journey Diagram

WORKING:

- The user enters the destination and number of nights/days in the application or website.
- The request is sent to the AI Travel Itinerary Generation System.
- The AI engine analyzes the destination and trip duration to plan activities for each day.
- The system collects required information from external sources like maps, hotels, activities, and weather data.
- Finally, the system generates a personalized travel itinerary with daily plans, attractions, and useful travel suggestions.