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Still Travelling AI/ML internship Assignment   
  
**AI-Powered Travel Planner Report**

**Introduction**

This report documents the development of an AI-powered travel planner built using Groq API key and hosted on Streamlit. The system is designed to gather user preferences, suggest activities, and generate a personalized travel itinerary based on the provided inputs.

**Deliverables**

**1. Final Set of Prompts**

**Prompt 1: Input Refinement**

* **System Prompt**:

A screenshot of a computer program

AI-generated content may be incorrect.

* **User Prompt**:

A screenshot of a computer

AI-generated content may be incorrect.

* **Model Response**:

A screenshot of a computer

AI-generated content may be incorrect.

* **Process Documentation**:  
  This prompt refines vague user inputs by extracting or assuming key details required for planning. It ensures the model asks for clarification when needed (e.g., dietary restrictions) while aligning with stated preferences (history, budget). The process uses a structured format to guide the AI effectively, making it adaptable to incomplete inputs.

**Prompt 2: Activity Suggestion**

* **System Prompt**:

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AI-generated content may be incorrect.

* **User Prompt**:

A screenshot of a travel planner

AI-generated content may be incorrect.

* **Model Response**:

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AI-generated content may be incorrect.

These align with your interest and architecture while keeping costs manageable.

* **Process Documentation**:  
  This prompt uses the refined preferences to generate a mix of popular and offbeat suggestions. It leverages the AI’s ability to contextualize inputs (budget, duration, destination) and ensures variety by explicitly requesting both famous and lesser-known options. Web search could enhance accuracy, but the model’s knowledge suffices for prototyping.

**Prompt 3: Itinerary Generation**

* **System Prompt**:

text

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Create a {days}-day itinerary for {destination} with:

- Morning, Afternoon, and Evening sections

- Logical geographical grouping of activities

- Estimated transportation times

- Budget allocations for activities and meals

- Considerations for {travelers} travelers

- Travel options from {start\_city} to {destination}

* **User Prompt**:

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AI-generated content may be incorrect.

* **Model Response**:

**A screenshot of a black background with white text

AI-generated content may be incorrect.**5-Day Itinerary for Barcelona (2 Travelers)

\*\*Travel from Mumbai to Barcelona\*\*: Flight (approx. INR 30,000 round trip/person, 9-10 hrs).

\*\*Total Budget\*\*: INR 50,000 (excluding flights).

\*\*Day 1: Arrival & Gothic Quarter\*\*

- \*\*Morning\*\*: Arrive in Barcelona, check into budget hostel (INR 2,000/night).

- \*\*Afternoon\*\*: Explore Gothic Quarter (free) - 1 hr walk from hostel.

- \*\*Evening\*\*: Dinner at local tapas bar (INR 1,000 total).

\*\*Day 2: Sagrada Familia & Park Güell\*\*

- \*\*Morning\*\*: Visit Sagrada Familia (INR 4,000 total) - 15 min metro.

- \*\*Afternoon\*\*: Park Güell (INR 2,000 total) - 20 min bus.

- \*\*Evening\*\*: Relax at Plaça Reial (free) - 10 min walk, dinner (INR 1,000).

\*\*Day 3: Casa Batlló & Nearby\*\*

- \*\*Morning\*\*: Casa Batlló (INR 5,000 total) - 10 min metro.

- \*\*Afternoon\*\*: Stroll Passeig de Gràcia (free) - 5 min walk.

- \*\*Evening\*\*: Dinner (INR 1,000).

\*\*Day 4: Montjuïc Castle\*\*

- \*\*Morning\*\*: Montjuïc Castle (INR 1,000 total) - 30 min bus.

- \*\*Afternoon\*\*: Picnic at Montjuïc Park (INR 500).

- \*\*Evening\*\*: Return to hostel, dinner (INR 1,000).

\*\*Day 5: Departure\*\*

- \*\*Morning\*\*: Souvenir shopping (INR 2,000).

- \*\*Afternoon\*\*: Depart for Mumbai.

\*\*Budget Breakdown\*\*: Activities: INR 12,000, Meals: INR 6,500, Accommodation: INR 10,000, Misc: INR 2,000. Total: INR 30,500 (within INR 50,000).

* **Process Documentation**:  
  This prompt integrates all prior inputs and suggestions into a structured itinerary. It ensures logical grouping (e.g., pairing nearby attractions like Sagrada Familia and Park Güell) and includes practical details (transport times, budget). The process demonstrates chaining by building on earlier outputs, ensuring coherence and personalization.

**2. Sample Inputs and Outputs**

* **Sample Input**:  
  Starting City: Mumbai, India; Destination: Barcelona, Spain; Budget: INR 50,000; Duration: 5 days; Travelers: 2; Preferences: History and architecture, budget-friendly.
* **Curated Suggestions**: See Prompt 2 Model Response.
* **Detailed Itinerary**: See Prompt 3 Model Response.

**3. Hosted Application**

* The application is deployed on Streamlit, allowing users to input details via a simple UI and receive a downloadable itinerary.

**Evaluation Criteria**

**Prompt Design**

* **Clarity and Specificity**: Each prompt is structured with clear instructions (e.g., “gather the following details,” “include both popular and lesser-known experiences”), guiding the model to produce relevant outputs.
* **Relevance**: Outputs align with user needs (e.g., budget-friendly historical sites for Barcelona).

**Prompt Chaining**

* **Strategic Use**: The system chains prompts effectively: input refinement feeds into activity suggestions, which inform the final itinerary. This maintains a logical flow from vague preferences to a detailed plan.
* **Coherence**: Responses build on each other, ensuring a seamless user experience.

**Personalization**

* **Alignment with Preferences**: The itinerary reflects the user’s love for history and architecture (e.g., Sagrada Familia, Gothic Quarter) and adheres to budget constraints.
* **Uniqueness**: Suggestions like Montjuïc Castle add a lesser-known element tailored to the user’s interests.

**Documentation**

* **Reasoning**: Each prompt’s process is explained, detailing how it meets the assignment goals (e.g., refining inputs, ensuring variety, structuring outputs).
* **Effectiveness**: The concise paragraphs clarify design choices and their impact on output quality.

**Bonus Challenge**

* **Flexible Input Handling**: The system handles vague inputs (e.g., “budget-friendly options”) by assuming reasonable defaults (e.g., hostel stays) and refining them in the first prompt.
* **Example**: A user input like “moderate budget, mix of famous and offbeat places” would trigger refinement for specific budget figures and interest clarification, ensuring precise suggestions.

**Conclusion**

This AI-powered travel planner meets the assignment objectives by delivering a personalized, coherent itinerary through well-designed, chained prompts. The hosted Streamlit app provides a practical interface for testing, and the documentation explains the process thoroughly, fulfilling all evaluation criteria.