

Results & Discussion

- ❖ Existing travel recommendation systems provide generic, static suggestions without considering real-time updates, user preferences, or contextual relevance, making trip planning inefficient and impersonal.
- ❖ This project leverages retrieval-augmented generation (RAG) and FAISS-based vector search to dynamically curate travel recommendations based on user interests, recent trends, and real-time data.
- ❖ Unlike conventional planners, this system not only assists in travel planning but also generates AI-driven travel narratives, offering users a seamless way to document and relive their experiences.

Introduction & Objective

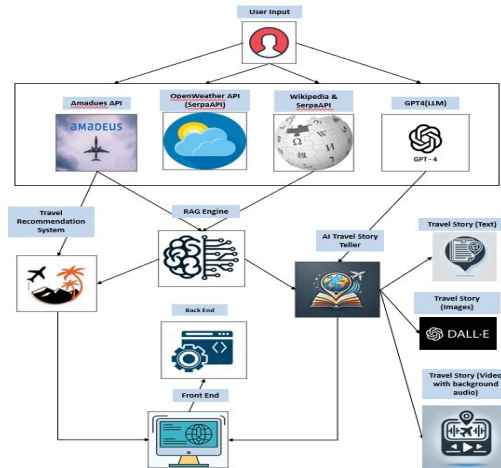
This project integrates APIs like **OpenAI**, **Amadeus API**, **Google Maps API**, **Weather API**, **SERPAPI**, and **Geoapify API** to offer real-time, dynamic travel recommendations tailored to user preferences.

Objectives:



- ❖ Provides users with an interactive platform to customize their trips via a chatbot, ensuring recommendations align with their interests and real-time travel conditions.
- ❖ Generates engaging travel stories and video previews, allowing users to visualize their journey and build anticipation before the trip.

Methodology

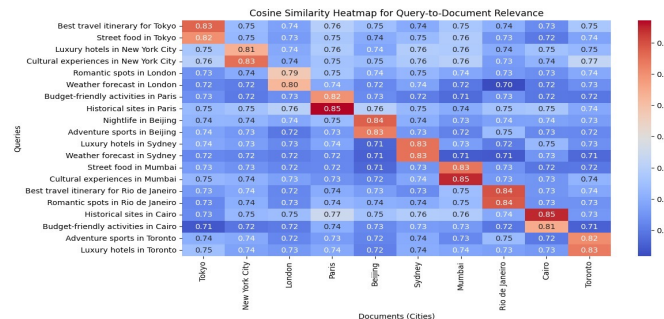
- ❖ Travelers enter their destination, dates, and preferences, which serve as the foundation for recommendations.
- ❖ **API-Based Data Retrieval:**
 - ❖ Amadeus API fetches flight details and itineraries.
 - ❖ OpenWeather API (SerpAPI) provides real-time weather updates.
 - ❖ Wikipedia & SerpAPI gather historical and cultural information.
 - ❖ GPT-4 (LLM) generates personalized travel insights.
- ❖ A **Travel Recommendation System** suggests itineraries, while the **RAG Engine** refines results by retrieving relevant travel information.
- ❖ The **AI Travel Story Teller** generates engaging narratives using GPT-4, complemented by DALL-E for images and additional tools for video storytelling.
- ❖ Users receive **text-based stories, AI-generated travel images, and immersive video experiences** with background audio.
- ❖ A web-based **front-end interface** allows users to access recommendations, explore AI-generated stories, and customize their itinerary.



DALL-E	Stable diffusion
Captures details well	May interpret vaguely
Illustrative, slightly artificial, vibrant	More photorealistic but sometimes muted
Strong, well-structured, proportionate	Can struggle with fine details, distortions possible
Concept art, fantasy, storytelling	Realistic landscapes, textures, artistic freedom

Analysis

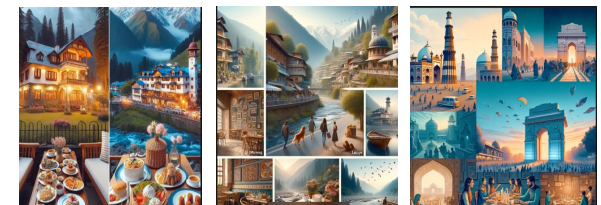
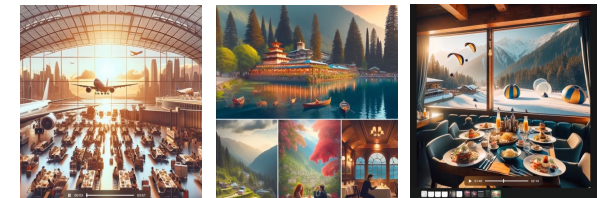


Offers personalized itineraries, Integrates video and AI-generated stories to enhance user engagement. system ensures flexibility and convenience, adapting to users' changing preferences for a seamless travel experience.

Example: Trip from **Kansas City** to **Manali** (March 21 - March 31, 2025). Summary of travel plan generated

- ❖ Fly from Kansas City to Delhi, then take a local flight to Manali. Upon arrival, check in to the hotel for a relaxed start.

- ❖ Visit **Hidimba Temple, Manali Sanctuary, Solang Valley**, and experience the breathtaking **Rohtang Pass**. Dine at charming cafes like **Johnson's Café, Il Forno, Fat Plate Café, and Lazy Dog** while enjoying local cuisine.
- ❖ Fly back to Delhi and explore iconic attractions like **Qutub Minar, Humayun's Tomb, and India Gate**. Visit bustling markets like **Chandni Chowk**, try local delicacies at recommended restaurants, and immerse yourself in Delhi's vibrant street culture.



Conclusion & Future Scope

- ❖ Our AI-powered travel companion transforms trip planning into an immersive adventure, delivering personalized itineraries, stunning visuals, and interactive previews. With real-time insights and AI-driven storytelling, we make every journey exciting before it even begins.
- ❖ Future scope includes Expanding to AR/VR travel simulations, multilingual AI storytelling, interactive voice guides, real-time data feeds, booking platform integration, and personalized AI-generated travel videos featuring user integration.

References

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Sample video output



Departure : Kansas
Destination: Manali
Start date: 21-03-2025
End date: 31-03-2025
Purpose of visit: Romantic trip

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