
IBM HACKATHON PROJECT

TRAVEL PLANNER AGENT

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OUTLINE

- Problem Statement
- Technology used
- Wow factor
- End users
- Result
- Conclusion
- Git-hub Link
- Future scope
- IBM Certifications

PROBLEM STATEMENT

Planning a trip can be overwhelming and time-consuming, especially when considering multiple destinations, accommodations, transport options, weather conditions, and local attractions.

Proposed Solution:

The **Travel Planner Agent** aims to eliminate the hassle of manual planning automatically by deeply understanding user preferences, budgets, and travel goals, the agent delivers customized plans that enhance convenience and satisfaction.

TECHNOLOGY USED

- **IBM Cloud Lite Services** – Cloud hosting and scalable backend deployment.
- **Foundation Models for Natural Language & Vision Understanding:**
 1. **IBM Granite Foundation Models** – For natural language understanding and decision-making.
 2. **LLaMA 3–3 Instruct (Meta AI)** – Handles complex user instructions and planning queries.
 3. **LLaMA 3–2 Vision Instruct** – Supports image input and visual data processing.
- **Third-Party Integrations:**
 1. **Maps APIs (Google Map)** – For routing, location search, and map visualizations.
 2. **Weather APIs (OpenWeather / IBM Weather)** Real-time and forecast-based weather data.
 3. **Booking System APIs (e.g., Skyscanner, Booking.com)** Integration for transport, stay, and activity reservations.

IBM CLOUD SERVICES USED

- **Watsonx.ai Studio** – For building and testing the Travel Planner Agent using no-code agentic workflows.
- **Watsonx.ai Runtime** – Handles real-time execution of the deployed agent and APIs.
- **IBM Cloud Agent Lab** – Used to design the agent's logic and connect it with APIs and models.
- **IBM Granite Foundation Models** – Powers the AI's natural language understanding and conversation.
- **Meta LLaMA 3 (Vision & Instruct)** – Used for advanced reasoning, multimodal support (images + text), and intelligent responses based on user preferences.

WOW FACTORS

- **Real-Time Itinerary Updates** – Adapts instantly to changing travel plans or delays.
- **Personalized Trip Plans** – Tailors destinations, activities, and stays based on user preferences, budget, and history.
- **Smart Integration** – Connected with Maps, Weather, and Booking APIs for seamless travel guidance.
- **Auto-Booking & Optimization** – Suggests and manages bookings while optimizing time and routes.
- **AI-Powered Responses** – Powered by Granite & LLaMA 3 foundation models for intelligent travel advice.
- **Multimodal Support** – Accepts text/image inputs for enriched interaction and context understanding.
- **All-in-One Platform** – One-stop solution for planning, managing, and adjusting trips.

END USERS

- Solo Travelers
- Families
- Business Professionals
- Vacation Planners and Agencies
- Backpackers and Frequent Flyers

RESULTS

The image shows the live **Agent Preview** of the **Travel_Agent**, where the assistant welcomes users and introduces its purpose. It showcases a clean interface with a friendly greeting: **"Hi! I'm your Travel Planner Agent, here to design smart, personalized trips just for you."** This preview reflects the agent's readiness to interact, understand user needs, and offer tailored travel solutions — all powered by agentic AI and IBM foundation models.

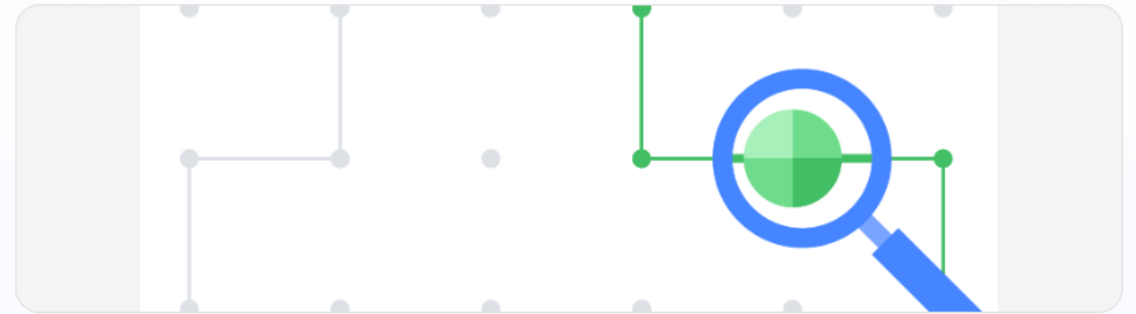
Agent preview



Travel_Agent 11:38 AM

Welcome to Travel_Agent

Hi! I'm your Travel Planner Agent, here to design smart, personalized trips just for you. From desti



Type something...



RESULTS

This output demonstrates the agent's ability to generate a 5-day day-wise travel plan from Hyderabad to Manali under a specified budget of ₹25,000. It includes details like transportation modes, stay costs, sightseeing locations, food recommendations, and cost estimates per day. This highlights the agent's strength in budget management, logistics optimization, and personalized itinerary planning based on user constraints.

Agent preview

 You: 11:40 AM

Give me day wise schedule for my trip from hyderabad to manali for 5 days under budget 25000

 Travel_Agent 11:40 AM

Based on the available information, here's a rough budget-friendly 5-day itinerary for your trip from Hyderabad to Manali:

Day 1:

- Departure: Take an overnight train (Sleeper Class or 3rd AC Sleeper) from Hyderabad to Delhi. Cost: Approximately ₹800 - ₹2000 per person.
- Arrival in Delhi: Proceed to Indira Gandhi International Airport for a morning flight to Chandigarh. From there, take a taxi or bus to Manali. Cost: Approximately ₹1500 - ₹3000 including transportation.
- Check-in at a budget hotel in Manali. Cost: Around ₹600 - ₹1500 per night.

Day 2:

- Local sightseeing: Visit Mall Road, Hadimba Temple, Vashisht Hot Springs, and Sidh Baba Temple. Keep meal costs low by eating street food or at local eateries. Estimated cost: ₹500 - ₹1000.

Day 3:

- Day trip to nearby attractions like Rohtang Pass (if open), Solang Valley, or Naggar Castle. Consider hiring a shared taxi to split costs. Estimated cost: ₹1000 - ₹2000.

Day 4:

- Explore more of Manali's local markets, visit Lakeside (Trout Museum), and enjoy a leisurely walk around the area. Keep meals affordable. Estimated cost: ₹500 - ₹1000.

Day 5:

- Morning at leisure. Post noon, start your return journey. You can either book an early evening flight back to Delhi and then take a late-night train to Hyderabad or continue by road directly to Hyderabad. Costs will vary based on availability and mode of transport chosen.

Type something...



RESULTS

This image displays a conversation between the user and the Travel Planner Agent, where the user inquires about travel options from Kolkata to Darjeeling. The agent provides multiple practical options using both train and flight, followed by a customized monsoon trip plan from Mangalore to Coorg. The response showcases the agent's ability to handle multi-part queries, fetch real-time route information, and suggest accommodation—all tailored to seasonal preferences.

Agent preview



You: 11:42 AM

What are the best travel options from Kolkata to Darjeeling by train or flight?



Travel_Agent 11:42 AM

The best travel options from Kolkata to Darjeeling by train or flight are:

1. Taking a train to New Jalpaiguri and then taking a taxi or bus to Darjeeling.
2. Booking a flight from Kolkata to Bagdogra Airport, which is the nearest airport to Darjeeling, and then taking a taxi or bus to Darjeeling.
3. Taking a train to Siliguri and then taking a taxi or bus to Darjeeling.

The ticket price varies according to travel dates, coach type, and individual preferences. The fastest way to reach Darjeeling from Kolkata is by Flight, Cab Via Siliguri, which takes approximately 4 hours.

► How did I get this answer?



You: 11:43 AM

I want a monsoon trip from Mangalore to Coorg. Plan my travel and stay.



Travel_Agent 11:43 AM

Based on the search results, here's a plan for your monsoon trip from Mangalore to Coorg:

1. Travel options: You can take a train or bus from Mangalore to Coorg. The journey takes around 5-6 hours by road.
2. Stay: There are several resorts and hotels in Coorg that offer comfortable stay during the monsoon season. Some popular options include:

|Type something...



CONCLUSION

- This AI-powered assistant transforms traditional travel planning into an **intelligent, adaptive, and engaging experience**. Built on IBM's cutting-edge AI infrastructure (Granite + Cloud Lite), the Travel Planner Agent bridges technology and convenience, redefining how individuals and families explore the world — smarter, faster, and with greater confidence.

GITHUB LINK

Link : <https://github.com/BhoomikaNeerasa/Travel-Planner-Agent.git> -

FUTURE SCOPE

- **Voice Assistant Integration** (e.g., via Watson Assistant or Whisper)
- **Multilingual Support** for global users
- **Multi-Currency Budgeting Tools**
- **Behavioral Learning** for long-term personalized suggestions
- **AR/VR Previews** of destinations and hotel rooms
- **Partnership Integrations** with travel brands and platforms for discounts & offers

IBM CERTIFICATIONS

- Getting Started with AI

In recognition of the commitment to achieve professional excellence



Bhoomika Sai Neerasa

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



Issued on: Jul 16, 2025

Issued by: IBM SkillsBuild

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RAG LAB Certificate

IBM SkillsBuild

Completion Certificate



This certificate is presented to
Bhoomika Sai Neerasa

for the completion of
**Lab: Retrieval Augmented Generation with
LangChain**
(ALM-COURSE_3824998)

According to the Adobe Learning Manager system of record

Completion date: 24 Jul 2025 (GMT)

Learning hours: 20 mins



THANK YOU