
IBM CLOUD AICTE PROJECT

TRAVEL PLANNER AI AGENT

Presented By:

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OUTLINE

- Problem Statement
- Technology used
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PROBLEM STATEMENT

Planning travel is often a complex and time-consuming task that involves researching destinations, comparing accommodation and transport options, monitoring weather conditions, and creating customized itineraries. With vast and scattered travel information across various platforms, users—especially budget-conscious or first-time travelers—struggle to make informed and efficient decisions.

Proposed Solution:

An AI-powered **Travel Planner Agent** that uses natural language understanding and document-based intelligence to assist users in planning personalized, budget-friendly, and optimized trips. The agent suggests destinations, builds itineraries, provides booking guidance, and offers contextual travel advice—all through an intuitive conversational interface, streamlining the entire travel planning experience.

TECHNOLOGY USED

- IBM Cloud Lite Services
- Watsonx.ai Studio
- LLaMA 3 model (Granite Model not Available)
- Vector Index (Document-based Q&A)
- Agent Lab for interactive prompt-based logic

IBM CLOUD SERVICES USED

- IBM Watsonx AI Studio
- IBM Watsonx Agent Lab
- IBM Cloud Object Storage
- IBM Foundation Models
- Deployment Space + Preview Testing

WOW FACTORS

The Travel Planner AI Agent is more than just a chatbot — it is a context-aware, intelligent travel assistant that transforms how users interact with travel planning. Unlike conventional travel apps that offer static suggestions, this agent understands natural language queries, extracts relevant information from a curated knowledge base, and dynamically generates customized trip plans.

Key Highlights:

- ✈️ Conversational Itinerary Builder
Generates day-wise travel plans based on user preferences, budget, and location — no forms required.
- 🧠 Context-Rich Travel Q&A
Answers complex travel queries using a custom document-based knowledge base.
- 🌴 Theme-Based Destination Suggestions
Recommends places based on mood, season, or trip type (relaxation, adventure, culture).
- 💬 Interactive & Personalized Dialogue
Supports follow-up changes like “Add a beach day” or “Make it cheaper” — just like a human planner.
- 💡 Fun, Helpful Travel Companion
Shares tips, facts, and challenge prompts like “Plan a ₹10,000 weekend trip” to keep users engaged.

END USERS

- Frequent Travelers
- Budget Backpackers
- Solo Travelers
- Travel Agencies / Blogs
- Students Planning Educational Trips
- First-Time International Tourists

RESULTS

Agent preview



Travel Agent 03:11 PM

Welcome to Travel Agent

Hi! I'm your AI Travel Buddy — here to help you plan trips and create perfect itineraries.



Type something...

RESULTS

Agent preview



You: 03:38 PM

Plan a 4-day budget trip to Goa with beach and nightlife recommendations.



Travel Agent 03:38 PM

Based on the RAGQuery output, here's a 4-day budget trip plan to Goa with beach and nightlife recommendations:

Day 1: Arrival and Beach Time

- Arrive at Goa International Airport
- Check-in at Sea View Inn (budget) or Casa Tropicana (mid-range)
- Spend the day at Palolem Beach, one of the most beautiful beaches in Goa
- Enjoy water sports like parasailing, kayaking, or paddleboarding
- In the evening, head to Baga Beach for a lively nightlife experience

Day 2: Explore Goa's Culture and History

- Start the day with a visit to the Goa State Museum to learn about the state's history and culture
- Head to the nearby Fort Aguada, a 17th-century Portuguese fort
- In the afternoon, visit the famous Anjuna Flea Market for some shopping and local cuisine
- In the evening, enjoy a sunset cruise at the Mandovi River

Day 3: Beach-Hopping and Water Sports

- Spend the day beach-hopping at different beaches like Calangute, Baga, and Vagator

Type something...



RESULTS

Agent preview

► How did I get this answer?



You: 03:49 PM

Which flea markets in Goa are best for buying gifts



Travel Agent 03:49 PM

Based on the RAGQuery output, here are some of the best flea markets in Goa for buying gifts:

1. Anjuna Flea Market: This is one of the most popular flea markets in Goa, and it's a great place to find unique gifts such as handicrafts, clothing, and souvenirs.
2. Mapusa Market: This market is known for its wide range of products, including handicrafts, clothing, and local snacks. It's a great place to find gifts that are made by local artisans.
3. Panjim Market: This market is located in the capital city of Goa and offers a wide range of products, including handicrafts, clothing, and souvenirs. It's a great place to find gifts that are made by local artisans.
4. Vagator Flea Market: This market is located in the Vagator area of Goa and offers a wide range of products, including handicrafts, clothing, and souvenirs. It's a great place to find unique gifts that are made by local artisans.

These flea markets are great places to find unique and authentic gifts that are made by local artisans. They offer a wide range of products, including handicrafts, clothing, and souvenirs, and are a great way to support local businesses and communities.

► How did I get this answer?



|Type something...



RESULTS

Deployed AI Agent

The screenshot displays the IBM Watsonx user interface. At the top, the header includes the IBM Watsonx logo, an 'Upgrade' button, and user account information for 'Mayuri Agrawal's Account' in the 'Sydney' region. The breadcrumb trail indicates the current location: 'Deployment spaces / Travel Agent / Travel Agent /'. Below this, the 'Travel Agent' deployment is shown with a green 'Deployed' status and an 'Online' indicator. There are three tabs: 'API reference', 'Test', and 'Preview', with 'Preview' being the active tab. The main chat area shows a message from 'Travel Agent' at 04:25 PM: 'Welcome to Travel Agent. Hi! I'm your AI Travel Buddy – here to help you plan trips and create perfect itineraries.' Below the text is a graphic of a computer monitor displaying code, connected to various icons representing different services or data sources. At the bottom of the chat area is a text input field with the placeholder 'Type something...'. On the right side, a sidebar titled 'About this deployment' provides details: Name (Travel Agent), Description (Hi! I'm your AI Travel Buddy – here to help you plan trips and create perfect itineraries.), Deployment Details (ID: 1c3e844b-dee1-45..., No serving name, Software specification: runtime-24.1-py3.11, Hardware specification: Extra extra small: 1 CPU and 2 GB RAM, Copies: 1), Tags (wx-agent), Associated asset (Travel Agent), and Last modified (1 minute ago).

[Deployment spaces](#) / [Travel Agent](#) / [Travel Agent](#) /

Travel Agent ✓ Deployed Online

[API reference](#)

[Test](#)

[Preview](#)

[New chat](#)



You 11:05 PM

Plan a 7 days trip to Paris with all suitable recommendations.

Travel Agent 11:05 PM

Based on your query, here's a 7-day trip plan to Paris with suitable recommendations:

Day 1: Arrival in Paris

- Arrive at Charles de Gaulle Airport
- Take a taxi or metro to your hotel
- Check-in to your hotel and freshen up
- Visit the Eiffel Tower (open from 9:30 AM to 11:45 PM)
- Enjoy a Seine River Cruise (available from 10:30 AM to 10:30 PM)

Day 2: Parisian Landmarks

- Visit the Louvre Museum (open from 9:00 AM to 6:00 PM)
- Explore the Notre-Dame Cathedral (open from 8:00 AM to 6:45 PM)

Type something...



CONCLUSION

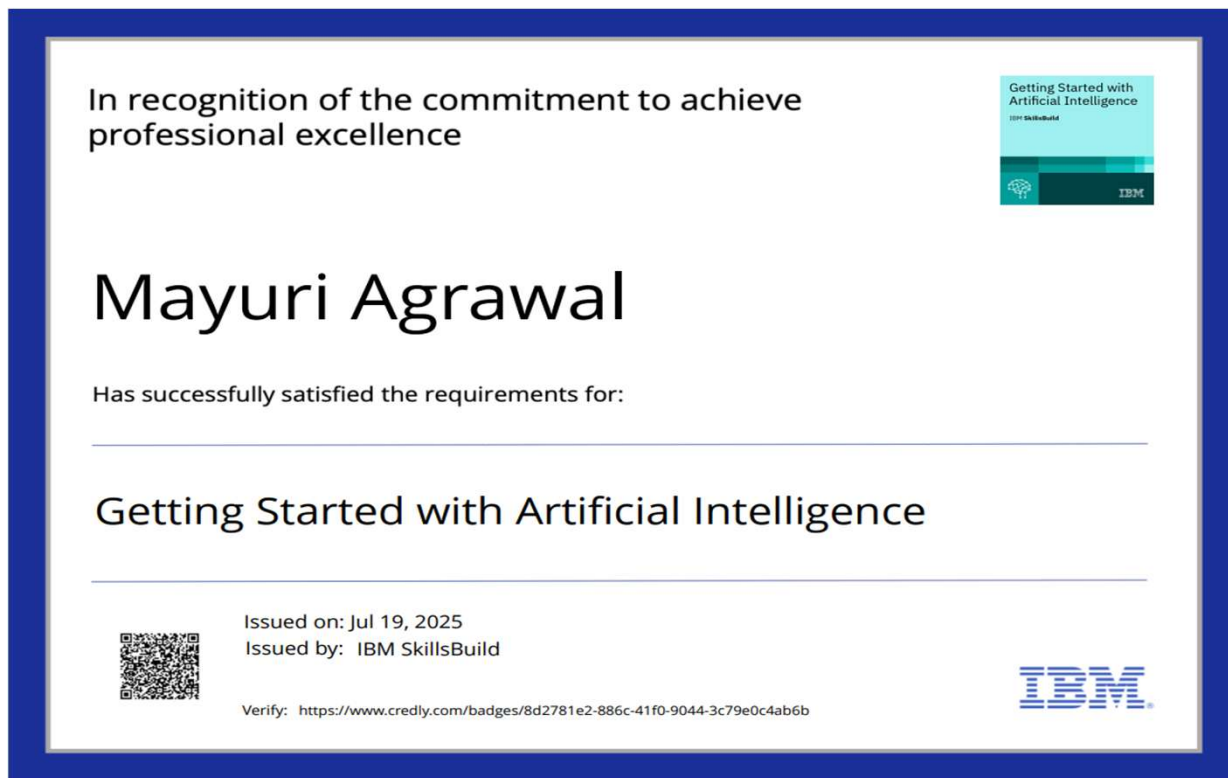
- The Travel Planner AI Agent successfully demonstrates how conversational AI can simplify complex, time-consuming travel planning tasks.
- By leveraging foundation models and vector-based knowledge retrieval, it provides intelligent, context-aware, and personalized responses to travel-related queries.
- It offers a seamless user experience, replacing traditional form-based planning with dynamic, dialogue-driven interaction.
- The agent caters to diverse user needs — from budget backpackers to luxury travelers — with real-time advice, curated recommendations, and flexible itinerary generation.
- This project showcases the practical use of IBM Watsonx and foundation models to solve a real-world problem in the tourism industry using scalable AI technology.

FUTURE SCOPE

- Integration with live flight/train/hotel APIs
- Real-time weather and safety alerts
- Mobile app version with voice chat
- Automatic trip budget calculator
- Support for international visa rules, currency conversion, and local laws
- Luggage checklist automation

IBM CERTIFICATIONS

Credly Certificate (Getting started with AI)



RAG LAB certificate



Credly Certificate (Journey to Cloud)



GITHUB LINK

- Github Link : https://github.com/mayurii-26/Travel_Planner_Agent

**LET'S MAKE TRAVEL SMARTER BY EXPLORING THE FUTURE OF TRAVEL WITH AI.
THANK YOU!**