
CAPSTONE PROJECT

TRAVEL ASSISTANT AI AGENT

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OUTLINE

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PROBLEM STATEMENT

A Travel Planner Agent is an AI-powered assistant that helps users plan trips efficiently and intelligently. It uses real-time data to suggest destinations, build itineraries, and recommend transport and accommodation options. This smart assistant transforms complex travel planning into a seamless, enjoyable process.

Proposed Solution:

An AI-powered Travel Planner Agent using IBM Watsonx.ai Granite models in Watson Studio, which collects user preferences and generates personalized travel plans. The agent performs destination recommendations, transport and accommodation suggestions, itinerary planning, and weather forecasting, all integrated into a single intelligent workflow.

TECHNOLOGY USED

IBM cloud lite services

Natural Language Processing (NLP)

Prompt Engineering

IBM Granite model

IBM CLOUD SERVICES USED

- IBM Cloud Watsonx AI Studio
- IBM Cloud Watsonx AI runtime
- IBM Cloud Agent Lab
- IBM Granite foundation model

WOW FACTORS

This agent will significantly reduce travel planning time, enhance the quality of trip decisions, assist first-time travelers in making informed choices, and encourage exploration by making travel information more personalized and actionable.

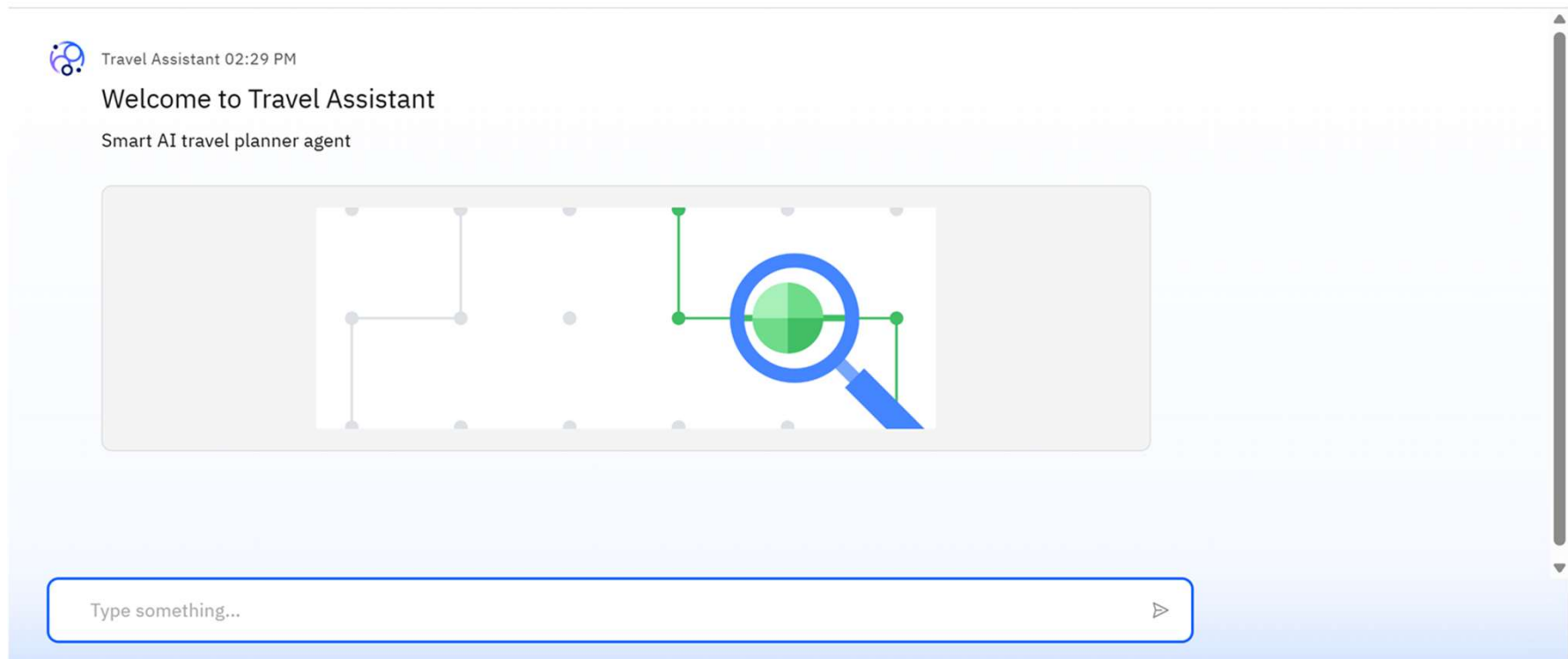
Unique features:

- Smart destination recommendations based on user preferences, budget, and travel season
- Auto-generated itineraries with daily activity suggestions
- Transport and accommodation planning optimized for cost and convenience
- Real-time weather insights for chosen destinations
- Budget-aware trip planning with detailed cost breakdowns
- Personalized alerts and updates (e.g., travel advisories, seasonal highlights)

END USERS

- Travelers,
- Tourists
- Family Vacationers
- Travel Agents
- Students
- Corporate Travelers

RESULTS



RESULTS



Travel Assistant 02:27 PM

Based on your preferences, I recommend visiting Berijam Lake in the Palani Hills, Tamil Nadu. It's a beautiful spot for trekking and nature lovers, and it's easily accessible from Chennai.

Here's a summary of your trip:

Destination: Berijam Lake, Palani Hills, Tamil Nadu

Top Reasons:

- Trekking and nature walks
- Scenic views of the lake and surrounding forest
- Opportunity to spot wildlife, including bison, elephants, and leopards
- Forest Department Camp and Eco-Education Center for visitors

Transport:

- From Chennai, take a bus or taxi to Kodaikanal (approx. 5 hours)
- From Kodaikanal, take a bus or taxi to Berijam Lake (approx. 1 hour)

Type something...



RESULTS

The screenshot displays the IBM Watsonx interface for a deployed model named 'Travel Assistant'. The browser address bar shows the URL: `jp-tok.dataplatform.cloud.ibm.com/ml-runtime/deployments/bcb00bcd-763b-4c41-b97b-60e38c256ff8/chat?space_id=42283f72-58e7-4ac4-b86a-6c6a08959715&context=wx&flush=true`. The interface includes a navigation bar with 'IBM watsonx', an 'Upgrade' button, and user information for 'Gayathri Viswanathan's Ac...'. The breadcrumb trail is 'Deployment spaces / dep2 / Travel Assistant /'. Below the header, the 'Travel Assistant' is shown as 'Deployed' and 'Online'. Three tabs are available: 'API reference', 'Test', and 'Preview', with 'Preview' being the active tab. A 'New chat +' button is located in the top right corner of the chat area. The chat content includes a 5-day itinerary for Kodaikanal, weather information for October, and a budget of ₹30,000. The interface concludes with a friendly message and a link to view the reasoning behind the answer. A text input field at the bottom is labeled 'Type something...'. The chat area has a vertical scrollbar on the right side.

Deployment spaces / dep2 / Travel Assistant /

Travel Assistant ✓ Deployed Online

API reference Test **Preview**

New chat +

- Day 1: Arrive at Kodaikanal, check-in to the Forest Department Camp
- Day 2: Trek to Berijam Lake, explore the surrounding forest and spot wildlife
- Day 3: Visit the Forest Department Camp and Eco-Education Center
- Day 4: Trek to nearby villages, explore local culture and cuisine
- Day 5: Return to Kodaikanal, depart from Chennai

Weather:

- October is a great time to visit Berijam Lake, with mild temperatures and plenty of sunshine
- Be prepared for occasional rain showers and cooler evenings

Budget:

- Approximate budget for the 5-day trip: ₹30,000

Have a great trip! 🌍 🗺️

► How did I get this answer?

Type something...

CONCLUSION

- The Travel Planner Agent simplifies and automates the entire trip planning process, making travel more accessible and stress-free.
- It leverages IBM Watsonx.ai and Granite models to deliver personalized, real-time recommendations for destinations, transport, stay, and activities.
- This intelligent assistant enhances user experience by reducing manual effort, ensuring cost-effective planning, and providing smart, data-driven travel insights.

GITHUB LINK

- <https://github.com/Gayathri-2510/Travel-Assistant-AI-Agent>

FUTURE SCOPE

- Voice-based travel planning
- Real-time booking integration
- Multilingual support
- Dynamic itinerary updates
- Integration with AR/VR for virtual previews

IBM CERTIFICATIONS



IBM **SkillsBuild**

Completion Certificate



This certificate is presented to

gayathri v

for the completion of

Lab: Retrieval Augmented Generation with LangChain

(ALM-COURSE_3824998)

According to the Adobe Learning Manager system of record

Completion date: 18 Jul 2025 (GMT)

Learning hours: 20 mins



THANK YOU