CAPSTONE PROJECT

TRAVEL ASSISTANT AI AGENT

Presented By:

Student name :V.Gayathri

College Name & Department :Mepco Schlenk Engineering

College, Computer Applications



OUTLINE

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PROBLEM STATEMENT

A Travel Planner Agent is an Al-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 Al-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 Al Studio
- IBM Cloud Watsonx Al 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)

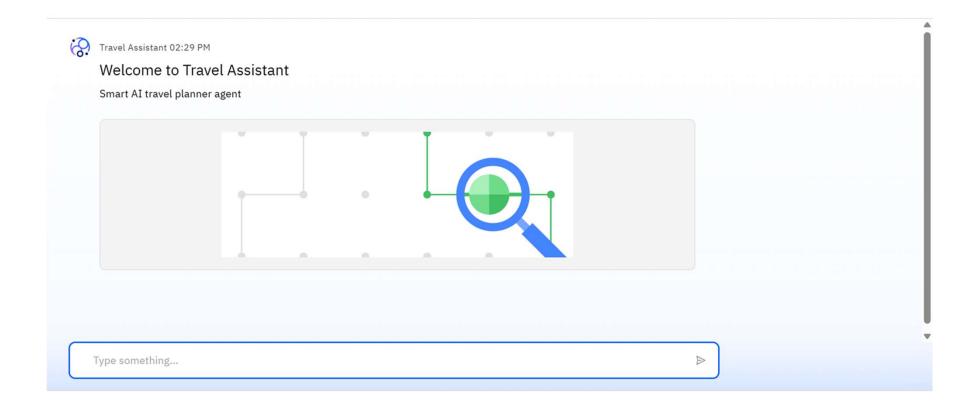


END USERS

- 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:

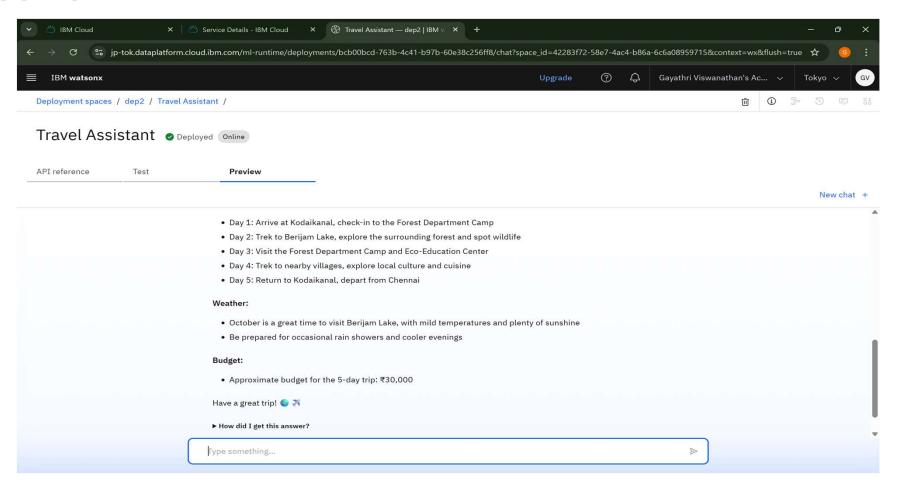
- From Chennai, take a bus or taxi to Kodaikanal (approx. 5 hours)
- From Kodaikanal, take a bus or taxi to Berijam Lake (approx. 1 hour)

Type something...

D



RESULTS





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-Al-Agent

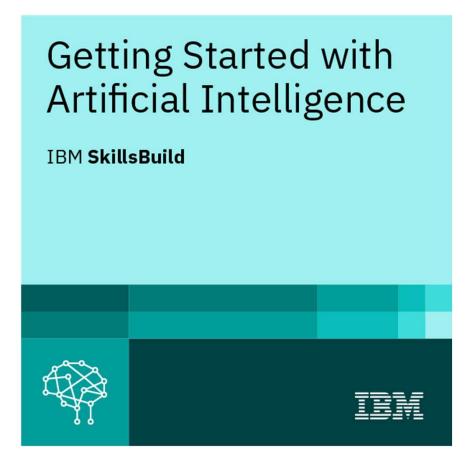


FUTURE SCOPE

- 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

