IBM ACITE PROJECT

Travelling Al Agent

Student name: Aditya Singh Sengar

College Name & Department: Kanpur Institute of

Technology & Computer Science(AIML)



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 time-consuming, confusing, and stressful, especially when travelers have to consider multiple factors like budget, weather, transport, accommodation, and local attractions.
- The challenge is to build an AI-powered Travel Planner Agent that simplifies this process by intelligently generating personalized travel plans using real-time data.
- The system should be able to understand user preferences, suggest destinations, plan itineraries, recommend hotels and transport, and adapt to changes such as delays or weather disruptions all within the constraints of time and budget.



Technology used

- IBM cloud lite services
- Natural Language Processing (NLP)
- Retrieval Augmented Generation (RAG)
- 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

1. Al-Generated Itineraries

- Uses IBM Granite LLM to generate smart, personalized travel plans based on user input.
- No need to manually search the agent does the thinking for the user.

2. Real-Time Integration

- Live weather updates, transport availability, and local events help adapt the trip dynamically.
- Travelers get up-to-date info for every part of their journey.

3. **Conversational Planning**

- Chatbot interface powered by Watson Assistant lets users plan trips by simply talking to the agent.
- No forms, no confusing interfaces just a conversation.

4. Handles Complex Constraints

- Understands and respects user preferences:
 - Budget
 - Time limits
 - Accessibility needs
- Suggests realistic and achievable plans within constraints.



End users

- 1. Individual Travelers
- 2. Families and Groups
- 3. Business Travelers
- 4. Travel Agencies and Tour Operators
- 6. Adventure and Niche Travelers

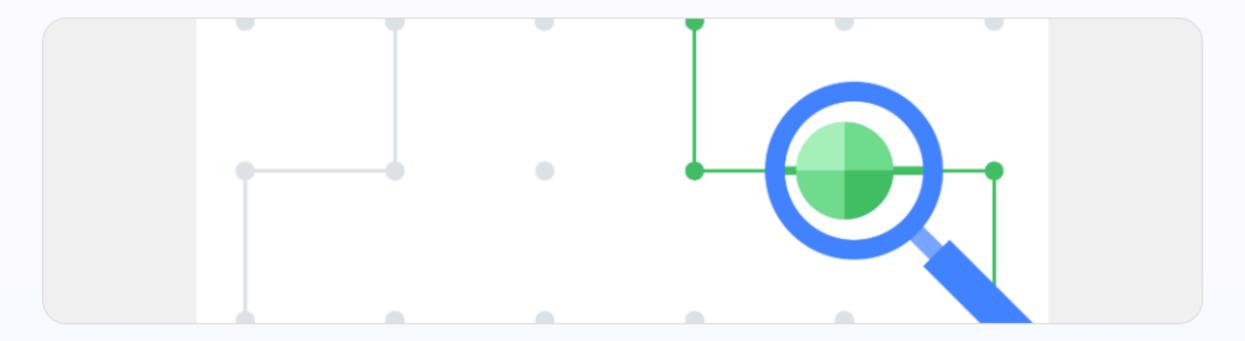




Travel Planner agent 09:37 PM

Welcome to Travel Planner agent

I am a Travel Planner Agent. My goal is to help users plan , Suggest Destinations ,Recommend Hotels.







Can you generate a travelling plan from kanpur to Goa through train for family of middle class



M Travel Planner agent 09:40 PM

Sure, I can help you plan a family trip from Kanpur to Goa by train, keeping in mind your middle-class budget. Here's a step-by-step plan:

Step 1: Ask the User What They Want

- · Travel dates: Please let me know your preferred travel dates.
- . Duration: How long do you plan to stay in Goa?
- · Family members: How many people are in your family?
- Budget: I'll make sure to suggest options that fit within your middle-class budget.

Step 2: Suggest Destinations (if not sure)

Goa is a perfect destination for a family vacation, offering beautiful beaches, water sports, historical churches, and vibrant nightlife.

Step 3: Create a Day-by-Day Plan (Itinerary)

Once I have the travel dates and duration, I'll create a day-by-day itinerary for your family trip to Goa. Here's a sample plan for a 5-day trip:

Day 1:

- Morning: Depart from Kanpur to Goa by train (e.g., 12302 Uttar Pradesh Express from Kanpur to Margao)
- Afternoon: Check-in at a family-friendly hotel (e.g., Cidade De Goa, Anjuna)
- Evening: Explore Calangute Beach and enjoy a leisurely walk

Day 2:

- Full day: Visit Aguada Fort, Aguada Beach, and the famous Basilica of Bom Jesus
- · Evening: Enjoy a traditional Goan dinner at a local restaurant

- Full day: Explore the spice plantations in Ponda and visit the Ancestral Goa Museum
- . Evening: Relax at Colva Beach

Day 4:

- . Full day: Visit the Bhagwan Shree Samarth Temple in Dwarves and enjoy a river cruise on the Mandovi River
- · Evening: Experience Goa's nightlife at a family-friendly club or bar

Day 5:

- · Morning: Visit the famous Basilica of Our Lady of the Mount (Bom Jesus Basilica)
- Afternoon: Depart from Goa to Kanpur by train (e.g., 12026 Mangalore Express from Vasco da Gama to Kanpur)

Step 4: Get Live Data

I'll use real-time data to provide you with the most accurate train schedules, weather forecasts, and local events happening during your trip.

Type something..





give me all the best spots list of goa



Travel Planner agent 09:43 PM

Sure, here are some of the best spots to visit in Goa, catering to various interests:

1. Beaches:

- · Calangute Beach: Known as the 'Queen of Beaches', it's perfect for water sports.
- Baga Beach: Ideal for both relaxation and water activities, with a lively nightlife scene.
- · Colva Beach: A serene and family-friendly beach with white sand and clear waters.
- Anjuna Beach: Popular for its laid-back vibe, flea market, and yoga retreats.
- Palolem Beach: A quieter, more secluded beach with turquoise waters, perfect for swimming and snorkeling.

2. Historical Sites:

- Basilica of Bom Jesus: A UNESCO World Heritage Site, featuring the tomb of St. Francis Xavier.
- · Aguada Fort: Offers stunning views of the Arabian Sea and is a great spot for sunset.
- Chapora Fort: Another historic fort with breathtaking panoramic views.

3. Churches:

- Se Cathedral: A grand baroque cathedral in Panjim, known for its intricate interior design.
- Our Lady of Mount Church (Bom Jesus Basilica): Another UNESCO World Heritage Site, famous for its Latin American baroque architecture.

4. Wildlife & Nature:

- Bhagwan Shree Samarth Temple (Dwarves): A beautiful temple with intricate carvings and a serene atmosphere.
- Cotigao Wildlife Sanctuary: A lush green sanctuary with diverse flora and fauna, perfect for nature lovers and trekking enthusiasts.
- Spice Plantations in Ponda: Explore the diverse spice plantations and learn about the local spice trade.

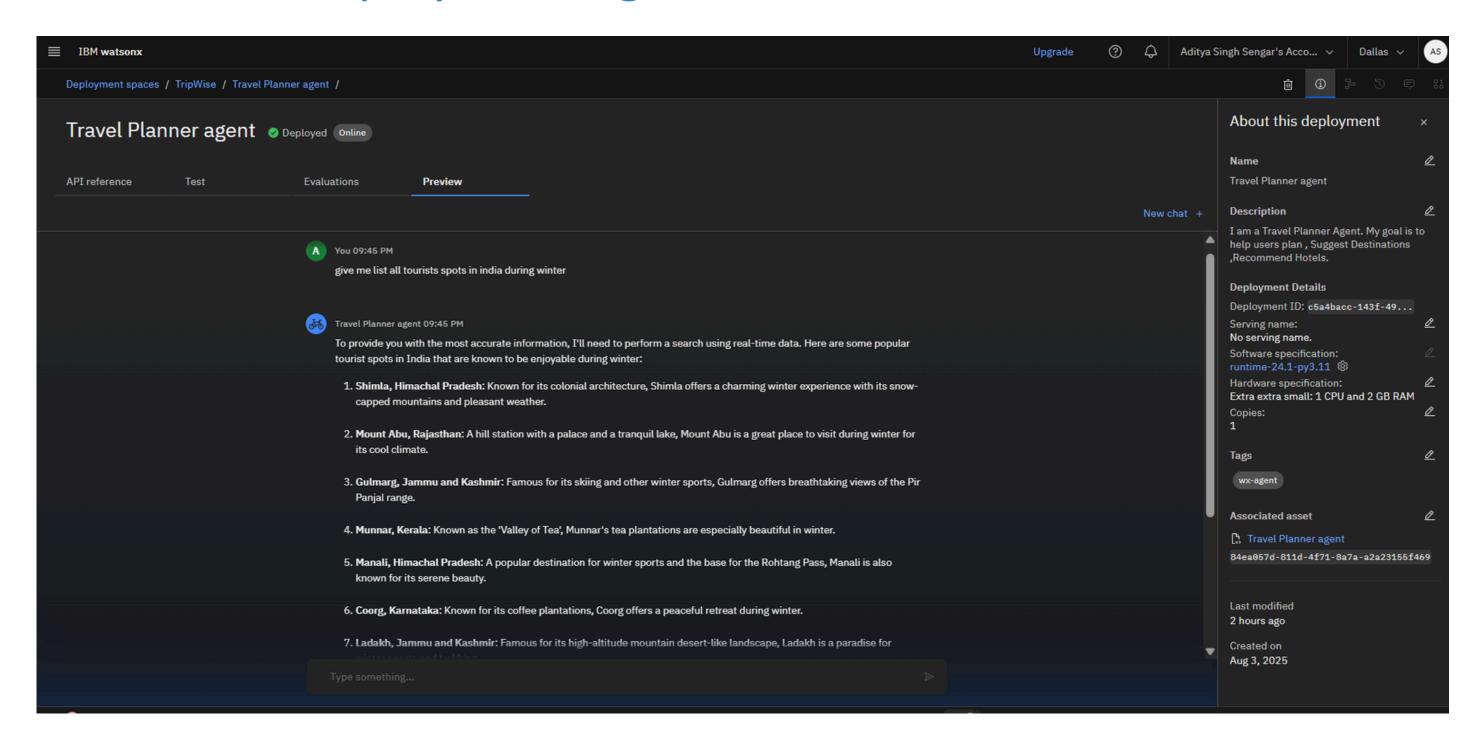
Type something...







Deployed Al Agent





Conclusion

- The Travel AI Agent demonstrates how artificial intelligence can revolutionize the way people plan and experience travel.
- By combining user preferences with real-time data on weather, transport, accommodations, and local attractions, the agent delivers fully personalized, efficient, and adaptable itineraries.
- Powered by IBM Cloud Lite services and the Granite foundation model, the solution showcases the potential of agentic AI in simplifying complex, time-consuming tasks.
- It not only reduces the burden of manual planning but also improves the travel experience through smart recommendations and on-the-go support.



GitHub Link

https://github.com/ADITYA8299/TripWise



Future scope

- Voice Interaction: Add voice input/output for hands-free trip planning
- Multilingual Support: Enable support for multiple languages to serve global users
- Live GPS Integration: Offer real-time rerouting, local suggestions based on current location
- Adaptive Learning: Use feedback and user behavior to improve future recommendations automatically
- End-to-End Travel Services: Integrate with APIs for visas, insurance, currency exchange, etc.
- Mobile App Version: Develop a full-featured mobile app for broader accessibility
- Integration with Local Transport: Connect with ride-sharing and local transport apps for last-mile connectivity



IBM Certifications

In recognition of the commitment to achieve professional excellence



Aditya Singh Sengar

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



Issued on: Jul 18, 2025 Issued by: IBM SkillsBuild

Verify: https://www.credly.com/badges/5beeb990-26fb-4adb-b112-f5088197b487





IBM SkillsBuild

Completion Certificate



This certificate is presented to

Aditya Singh Sengar

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

