

# IBM HACKATHON PROJECT

## TRAVEL AI AGENT

**Presented By:**

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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 with the abundance of travel information scattered across multiple platforms. Users often struggle to decide on destinations, create efficient itineraries, find reliable accommodation or transport options, and adapt plans based on seasonal, weather, or budget constraints. The lack of personalised and real-time travel guidance results in missed opportunities, inefficient plans, or increased costs—making travel planning a frustrating experience for many.

## Proposed Solution:

The proposed solution is an intelligent **Travel Planner Agent**, an AI-powered assistant built using IBM Watsonx.ai and IBM Granite. The agent interacts with users in natural language and provides personalised travel recommendations such as: Destinations based on season, budget, and interest Day-wise itineraries, Suggested transport and accommodation, Local experiences, food, and weather tips. It integrates live data from sources like Google Search, DuckDuckGo, weather APIs, and travel blogs to ensure accurate and timely responses.

# TECHNOLOGY USED

## 1. IBM Granite (LLM – Large Language Model)

- Model: `granite-3-3b-instruct`
- Purpose: Natural Language Understanding & Generation
- Supports Retrieval-Augmented Generation (RAG) for enhanced accuracy.

## 2. IBM Watsonx.ai

- Platform to access and interact with IBM Granite models.
- Enables prompt execution, tool integration, and AI assistant logic.
- Running the AI model with user prompts
- Configuring instructions and behaviour constraints (e.g., travel-only scope)

## 3. IBM Cloud Lite

- Hosting and deployment environment.
- Deploy the AI agent backend
- Host and serve APIs or frontend components
- Ensure secure and scalable access to the assistant

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# IBM CLOUD SERVICES USED

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

# WOW FACTORS

- **Conversational Trip Planning:**

Users can plan entire trips simply by chatting with the AI — no need to visit multiple travel websites or apps.

- **Personalised Itinerary Generation:**

Creates detailed, day-by-day itineraries tailored to the user's preferences, travel duration, season, and budget.

- **Real-Time Relevance via RAG:**

Uses Retrieval-Augmented Generation (RAG) to dynamically include live search results, seasonal travel tips, and local recommendations.

- **Smart Destination Matching:**

Suggests travel locations based on weather, time of year, interests (e.g., beach, adventure, culture), and budget constraints.

- **Local Experience & Culture Embedding:**

Recommends not just tourist attractions, but also food, festivals, packing tips, and safety advice — enhancing the cultural depth of the plan.

- **Multi-source Knowledge Integration:**

Simulates responses using data from trusted platforms like MakeMyTrip, Goibibo, RedBus, TripAdvisor, and real-time web search.

- **Budget Optimization Suggestions:**

Offers cost-conscious alternatives for hotels, transport, and activities — perfect for students, backpackers, or budget travelers.

- **Zero-Frustration Interface:**

Eliminates the hassle of switching between multiple apps by bringing all planning elements into a single smart assistant.

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## END USERS

- Students & Budget Travelers
- Working Professionals
- Families & Group Travelers
- Travel Bloggers & Content Creators
- Solo Travelers

# RESULTS

Travel Agent

✓ Deployed


Online

API reference

Test

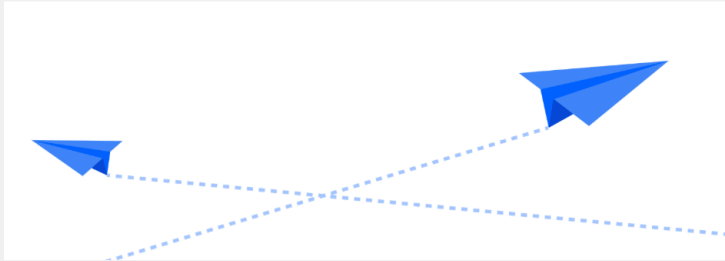
Preview

New chat +

 Travel Agent 07:00 PM

Welcome to Travel Agent

Hi there! 🙌 I'm your Travel Buddy – your personal AI-powered trip planner.



Type something...

➤



# RESULTS

Travel Agent ✓ Deployed Online

API reference

Test

Preview

New chat +



You 07:01 PM

plan trip to Hyderabad from pune of 8 days



Travel Agent 07:01 PM

🗿 Sure, I'd be happy to help you plan your 8-day trip from Pune to Hyderabad! Here's a preliminary itinerary based on popular attractions, local cuisine, and cultural experiences:

### Day 1: Arrival in Hyderabad

- Arrive at Rajiv Gandhi International Airport, Hyderabad.
- Check-in at a hotel (I recommend the Novotel Hyderabad Convention Centre for its central location and amenities).
- Rest and acclimate to the new city.
- Evening stroll around HITEC City for a taste of Hyderabad's modern skyline.

### Day 2: Explore Old Hyderabad

- Visit the iconic Charminar and explore the bustling lanes of the old city.
- Head to Chowmahalla Palace to admire its stunning architecture.
- Lunch at Paradise, a legendary Hyderabadi restaurant known for its biryani.
- Visit the historic Mecca Masjid in the afternoon.

Type something...



# RESULTS

Travel Agent ✓ Deployed Online

API reference

Test

Preview

[New chat](#) +

S

You 07:03 PM

how much money will require

🚲

Travel Agent 07:03 PM

💰 Estimating the budget for your 8-day trip to Hyderabad from Pune involves considering various factors such as accommodation, transportation, meals, sightseeing, shopping, and personal expenses. Here's a rough breakdown:

1. **Flights:** Round-trip tickets from Pune to Hyderabad can range from ₹3,000 to ₹6,000, depending on the airline and time of booking.
2. **Accommodation:** A mid-range hotel like the Novotel Hyderabad Convention Centre might cost around ₹3,000 to ₹5,000 per night. For 8 nights, this would be approximately ₹24,000 to ₹40,000.
3. **Transportation:** You can use a mix of taxis, public transport (Metro), and ride-sharing services. Allocate around ₹1,000 to ₹2,000 per day for transportation, totaling ₹8,000 to ₹16,000 for the trip.
4. **Meals:** Hyderabadi cuisine is famous for its biryanis and kebabs. Allocate around ₹500 to ₹1,000 per day for meals, totaling ₹4,000 to ₹8,000 for the trip.
5. **Sightseeing & Activities:** Entry fees for attractions, local experiences, and shopping can add up. Set aside around ₹1,000 to ₹2,000 for activities and entrance fees.
6. **Miscellaneous:** Always keep some buffer for unexpected expenses, emergencies, or additional souvenirs. Allocate around ₹10,000 for miscellaneous expenses.

Type something...



# RESULTS

## Deployed AI Agent

Travel Agent

✓ Deployed Online

API reference

Test

Preview

[New chat](#) +

S

You 07:04 PM

famous food



Travel Agent 07:04 PM

Hyderabad is renowned for its rich culinary heritage, blending influences from Mughlai, Turkish, and local Telugu cuisines. Here are some famous Hyderabad dishes you should definitely try during your visit:

1. **Hyderabad Biryani:** A world-famous mixed rice dish made with basmati rice, marinated meat (chicken, mutton, or fish), and an array of aromatic spices. It's a must-try for any food lover visiting Hyderabad.
2. **Haleem:** A slow-cooked dish made from wheat, lentils, barley, meat (usually mutton or beef), and a blend of spices. It's a popular street food, especially during Ramadan.
3. **Irani Chai and Kebab:** Irani cafes in Hyderabad are famous for their strong tea and mouth-watering kebabs, such as the seekh and tandoori kebabs.
4. **Pathani Chai:** A unique blend of green tea, milk, sugar, and spices, typically served in small glasses. It's a popular beverage among locals and tourists alike.
5. **Gosht ki Rosta:** A rich and tender mutton dish cooked in a creamy gravy with yogurt, cream, and a blend of spices.

Type something...



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## CONCLUSION

The Travel Planner Agent effectively simplifies travel planning by using the power of generative AI and retrieval-augmented intelligence. It delivers personalised, real-time answers tailored to user goals and budgets. The use of IBM Granite ensures conversational fluency, while tools like web crawlers and weather APIs enhance accuracy. The project demonstrates how Agentic AI can transform traditional trip planning into a smart, seamless experience.

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## GITHUB LINK

- <https://github.com/Wolverine0007/Travel-Planner-AI-Agent>

# FUTURE SCOPE

- Add multilingual support for Indian languages
- Integrate live hotel and flight booking APIs
- Enable voice-based query input
- Add user profile & saved plans feature
- Deploy as a mobile app for wider reach

# IBM CERTIFICATIONS

In recognition of the commitment to achieve  
professional excellence



## SANKET BANATE

Has successfully satisfied the requirements for:

### Getting Started with Artificial Intelligence



Issued on: Jul 15, 2025

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Has successfully satisfied the requirements for:

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### Journey to Cloud: Envisioning Your Solution

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# IBM CERTIFICATIONS

IBM **SkillsBuild**

Completion Certificate



This certificate is presented to

**SANKET BANATE**

for the completion of

**Lab: Retrieval Augmented Generation with  
LangChain**

(ALM-COURSE\_3824998)

According to the Adobe Learning Manager system of record

**Completion date:** 16 Jul 2025 (GMT)

**Learning hours:** 20 mins



**THANK YOU**