CAPSTONE PROJECT

SMART TRAVEL PLANNER

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OUTLINE

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PROBLEM STATEMENT

Planning a trip involves several time-consuming tasks such as researching tourist attractions, checking local weather, estimating budgets, finding hotels and restaurants, and creating day-wise itineraries. For many travelers—especially those unfamiliar with a destination—this process can be overwhelming and often leads to poor planning, missed experiences, or overspending. There is a need for an intelligent assistant that can provide relevant, personalized, and concise travel information in one place without requiring any coding or technical knowledge from the user.



PROPOSED SOLUTION

- This project presents an **Al-powered Travel Planner Agent built using IBM Watsonx.ai Studio** that acts as a conversational assistant to simplify the trip planning experience. The agent is designed to:
- Suggest real, interesting tourist destinations based on the user's location query.
- Provide clickable Google Map links to each suggested place.
- Answer queries about food, accommodation, and approximate costs only when specifically asked.
- Include weather information for the target destination upon request.



TECHNOLOGY USED

IBM cloud lite services

Natural Language Processing (NLP)

Retrieval Augmented Generation (RAG)

IBM Granite model



IBM Cloud Service used

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



WOW FACTORS

Context-Aware Responses

- The agent understands user intent and responds differently based on how a question is asked.
- Example: If asked for a "5-day tour plan," it gives only the itinerary; if asked for cost, food, or hotel, it provides detailed information only then—keeping replies relevant and clutter-free.

Instant Google Maps Integration

Every place suggestion includes a clickable Google Maps link, making it easy for users to explore locations right away without searching manually.



On-Demand Weather Info

 Users can ask about the current or general weather of any location, and the agent delivers helpful, location-based weather updates.

Food and Hotel Insights

 The agent recommends local cuisines, available restaurants, and hotel options—complete with approximate cost ranges and location links.

Fully No-Code AI Agent

The entire solution is built using IBM Watsonx.ai, requiring no coding, making it easy to maintain, extend, or replicate.

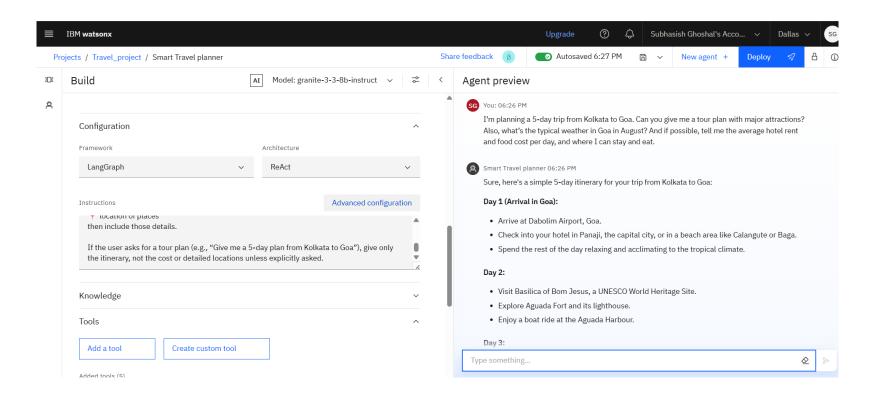


END USERS

- Casual Travelers & Tourists
- Busy Professionals
- Student & Young explorers
- Travel Agencies



RESULTS





Smart Travel planner • Deployed Online

Preview

Test

API reference

give me some popular street food option and cost along with thier location in kolkata

Smart Travel planner 10:43 PM
Here are some popular street food options in Kolkata, along with their estimated costs and locations:

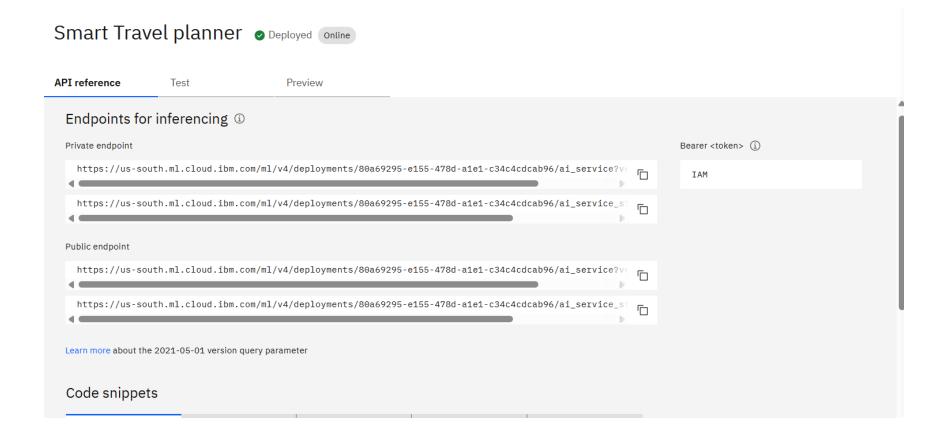
1. Kolkata's Fuchka: Enjoy these crispy, tangy treats filled with potatoes, chickpeas, and tamarind chutney. You can find them almost everywhere, but try near College Street for the best experience. View on Map: https://www.google.com/maps/search/College+Street,+Kolkata

2. Kathi Rolls: These delicious wraps filled with spiced meat, onions, and chutneys are a must-try. Head to Park Street or Park Circus for the best Kathi Rolls in town. View on Map: https://www.google.com/maps/search/Park+Street,+Kolkata

3. Jhal Muri: A puffed rice dish tossed with potatoes, chickpeas, and a spicy sweet-and-sour sauce. It's a cheap and filling
Type something...



Deployed Al Agent





CONCLUSION

The Travel Planner Agent built using IBM Watsonx.ai is a smart, user-friendly AI assistant that simplifies and personalizes the travel planning process. By understanding user queries and responding with clear suggestions, clickable map links, and context-aware details like food, hotel costs, and weather, it creates a smooth and engaging experience for travelers.



FUTURE SCOPE

Real-Time Booking Integration

Connect with APIs from airlines, railways, and hotel platforms (like MakeMyTrip, IRCTC, Booking.com) to allow instant reservations directly through the chatbot.

Voice Assistant support

Integrate with voice services (e.g., Google Assistant, Alexa) for handsfree travel planning and on-the-go interactions.



Budget Optimization Filter

 Automatically calculate the cheapest or most luxurious options based on a given budget, and provide smart itinerary suggestions accordingly.

User Account & History

Allow users to create profiles, save past plans, and receive personalized destination recommendations based on their history and preferences.



IBM CERTIFICATIONS

Credly Certificate(getting started with AI)

In recognition of the commitment to achieve professional excellence



Subhasish Ghoshal

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



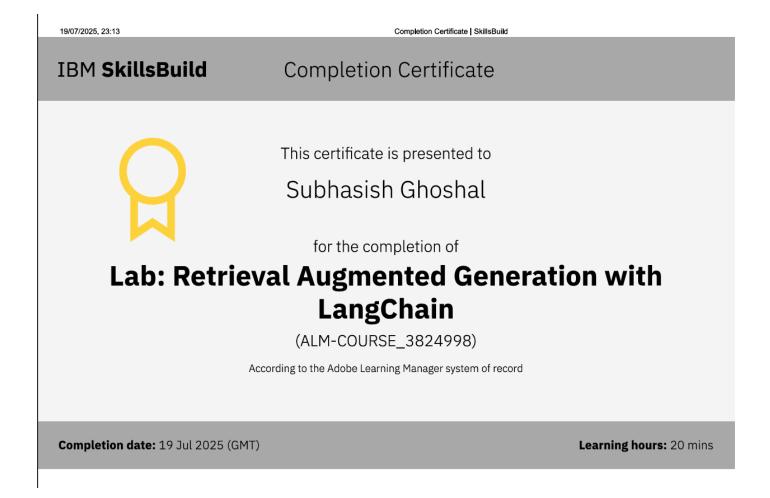
Issued on: Jul 17, 2025 Issued by: IBM SkillsBuild

Verify: https://www.credly.com/badges/105abe1c-a773-40b2-b3c1-9a0084777edf





RAG LAB Certificate





Credly Certificate(Journey to Cloud)

In recognition of the commitment to achieve professional excellence



Subhasish Ghoshal

Has successfully satisfied the requirements for:

Journey to Cloud: Envisioning Your Solution



Issued on: Jul 19, 2025 Issued by: IBM SkillsBuild







GITHUB LINK

https://github.com/subhasish1-hub/Travel-Agent



THANK YOU

