### IBM HACKATHON PROJECT

## TRAVEL PLANNER AGENT

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### **OUTLINE**

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- Wow factor
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- Results
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# PROBLEM STATEMENT

### Design and build an Al-driven Travel Planner Agent that:

- Creates travel plans tailored to user preferences.
- Recommends destinations and generates customized itineraries.
- Suggests transportation and lodging options.
- Integrates real-time data such as weather, maps, and local events.
- Handles bookings and provides timely alerts.
- Dynamically adjusts schedules for optimal planning.



# **TECHNOLOGY USED**

- IBM cloud lite services
- Natural Language Processing (NLP)
- Large Language models (LLM)
- IBM Granite model
- IBM App Connect



### **IBM CLOUD SERVICES USED**

- IBM Cloud Watsonx AI Studio
- IBM Cloud Watsonx AI runtime
- IBM Cloud Functions
- IBM Cloud service
- IBM Granite (via watsonx.ai studio)
- IBM Cloud Object Storage
- IBM AI Tools



### **WOW FACTORS**

The Travel Planner Agent provides powerful capabilities, including real-time itinerary adjustments in response to weather changes and travel disruptions, ensuring a hassle-free travel experience. Leveraging the advanced AI of IBM Granite, it accurately interprets user inputs to deliver deeply personalized travel plans. The agent intelligently suggests destinations and routes aligned with individual preferences, budgets, and constraints. Its seamless integration with IBM Cloud services creates a smooth, conversational interface that transforms complex travel planning into a simple, user-friendly process.

#### **Key features:**

- Dynamic itinerary updates based on live weather conditions and travel status.
- Personalized recommendations through natural language understanding powered by IBM Granite.
- Customized destination and activity suggestions based on user interests, budget, and trip length.
- Integrated access to maps, weather, and booking data for unified planning.
- Efficient serverless backend powered by IBM Cloud Functions.
- Conversational, chat-based interaction enabled by Watson Assistant.

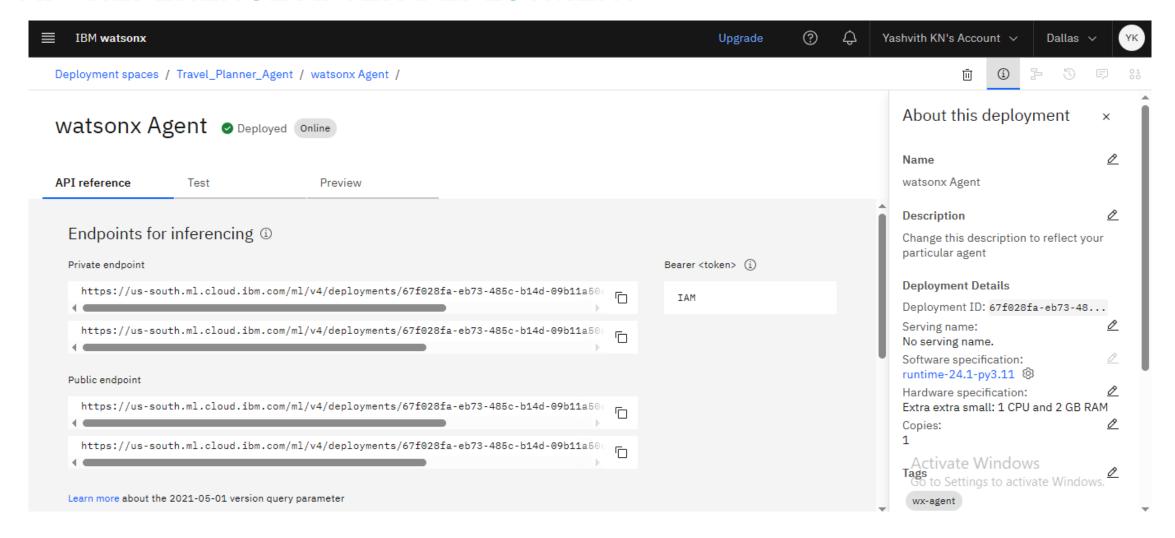


#### **END USERS**

- Solo travelers.
- Travel content creators and influencers.
- Travel companies providing personalized itineraries.
- Corporate professionals organizing multi-destination journeys.
- Scholars or researchers traveling for academic purposes.

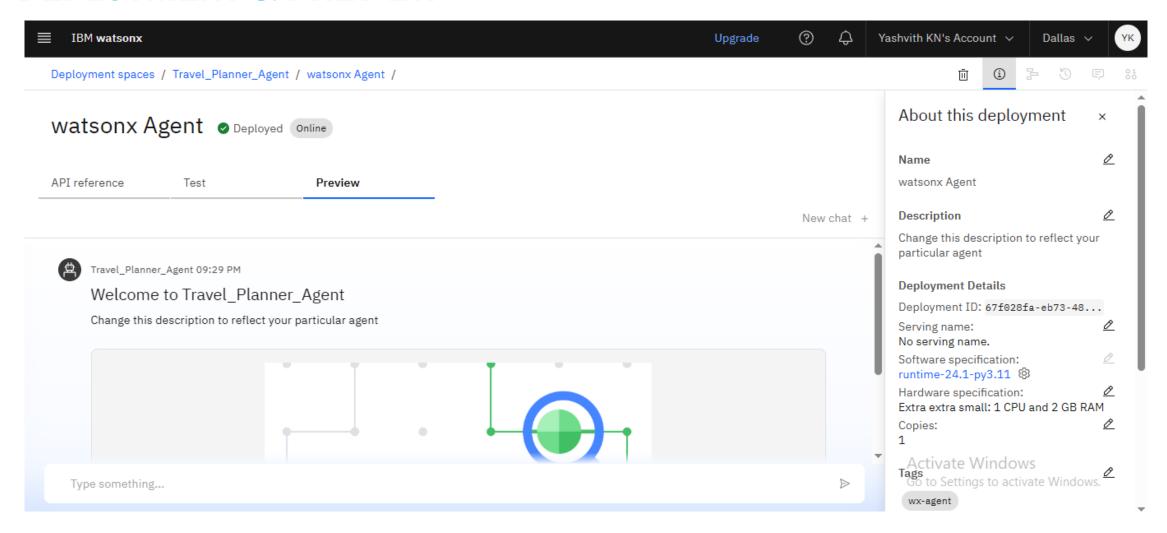


#### API REFERENCE AFTER DEPLOYMENT



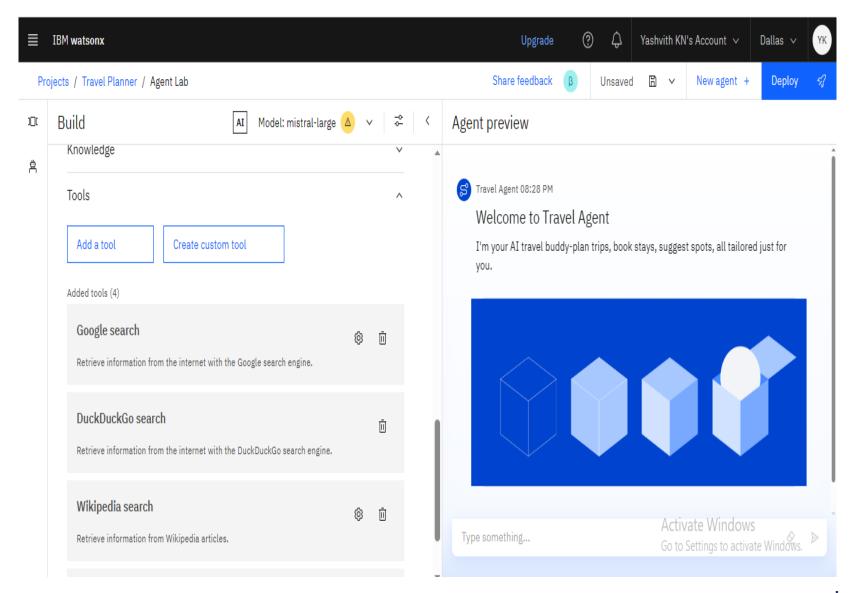


#### **DEPLOYMENT & PREVIEW**



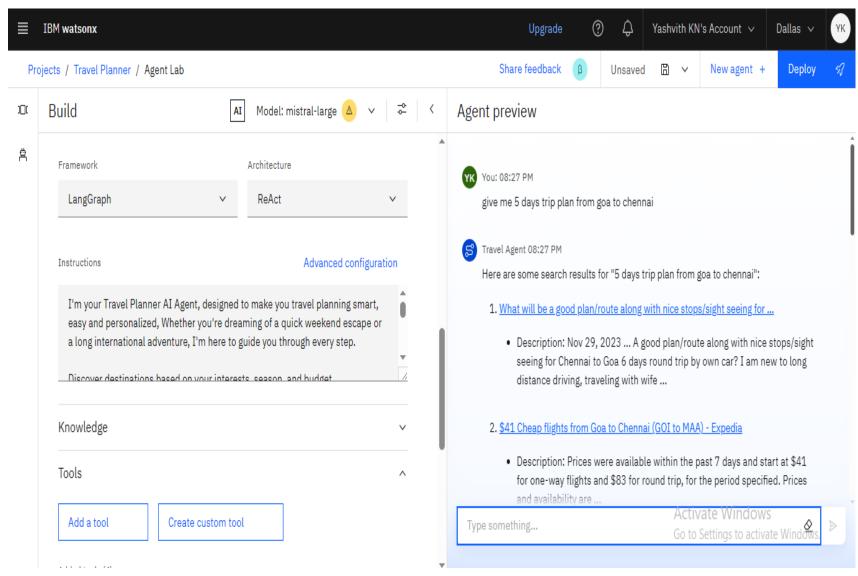


#### **RESULTS**



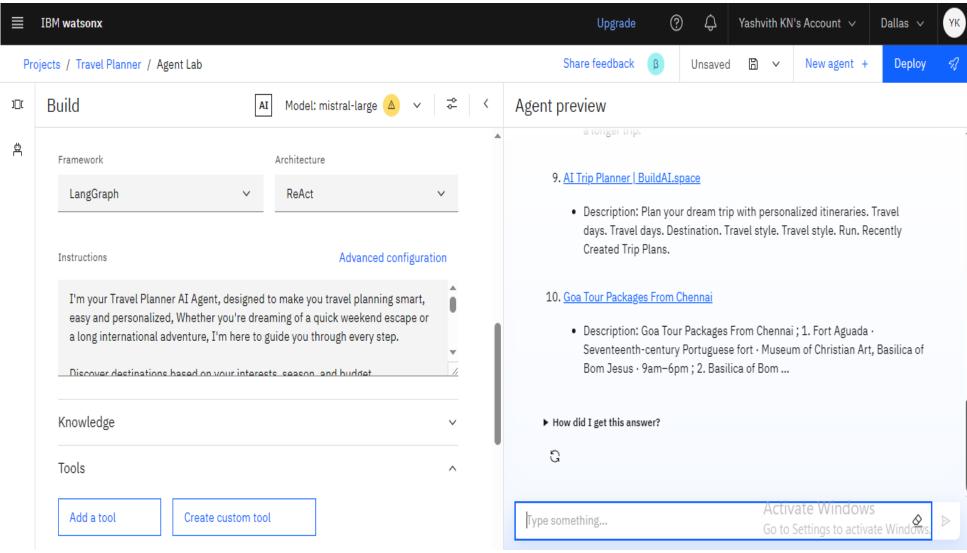


#### **RESULTS**





#### **RESULTS**





#### CONCLUSION

- The Travel Planner Agent simplifies the complexities involved in trip planning.
- Utilizing IBM Cloud AI services, it provides real-time, personalized, and adaptive travel solutions, enabling users to experience a seamlessly organized journey.
- This demonstrates a practical use of AI in addressing real-world logistical challenges while maintaining a user-friendly and efficient experience.



### **GITHUB LINK**

https://github.com/YashvithaKN/TRAVEL-PLANNER-AGENT-IBM-PROJECT.git



### **FUTURE SCOPE**

- Links to booking platforms (such as Skyscanner and Airbnb)
- AR-powered virtual destination tours
- Integration with voice assistants (e.g., Alexa, Siri)
- Location-based emergency assistance and alerts
- Al-driven budget optimizer to maximize experiences within a user's budget
- Community features offering peer recommendations
- Watson Language Translator—enabled multilingual support
- Offline access for areas with limited connectivity



### **IBM CERTIFICATIONS**





### **IBM CERTIFICATIONS**





#### **IBM LAB CERTIFICATE**

#### IBM SkillsBuild

#### **Completion Certificate**



This certificate is presented to

Yashvitha KN

for the completion of

## Lab: Retrieval Augmented Generation with LangChain

(ALM-COURSE\_3824998)

According to the Adobe Learning Manager system of record

Completion date: 25 Jul 2025 (GMT)

Learning hours: 20 mins



## **THANK YOU**

