

IBM SKILLS BUILD FOR ACADEMIA PROJECT

TRAVEL PLANNER AGENT

Presented by:

Student Name :- Krishna Pratik

AICTE Student ID: STU65b53b5ccdc551706376028

Internship ID: INTERNSHIP_1748937226683eaa0a58abc

Department:- B.Tech CSE (3rd Year)

**College Name :- University School of Information, Communication & Technology (USICT),
GGSIPU**

OUTLINE

- - Problem Statement
- - Proposed Solution
- - System Approach
- - Technology Used
- - IBM Cloud Services Used
- - Wow Factor
- - End Users
- - Deployment
- - Results
- - Future Scope
- - Conclusion
- - IBM Certifications & Github Link
- - Thank You

PROBLEM STATEMENT - 05

- The Challenge - A Travel Planner Agent is an AI-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. By understanding user preferences, budgets, and constraints, it tailors personalized travel plans. Integrated with maps, weather updates, and local guides, it ensures a smooth travel experience. The agent can also manage bookings, alert users to changes, and optimize schedules on the go. This smart assistant transforms complex travel planning into a seamless, enjoyable process.
- Technology - Use of IBM cloud lite services /IBM Granite is mandatory.

PROPOSED SOLUTION

- **TravAI** is an AI-powered travel planning agent designed to simplify and personalize trip planning through intelligent conversation.
- It helps users by:
 - Asking for travel preferences like budget, destination, dates, and interests
 - Recommending personalized itineraries with places to visit, stay options, and local experiences
 - Simulating real-time weather updates and travel tips
 - Providing transport and accommodation suggestions based on user needs
 - Running entirely on IBM Cloud Lite using Granite language models via watsonx AgentLab
- **TravAI transforms traditional travel planning into a smooth, interactive, and efficient experience — all through one smart conversation.**

SYSTEM APPROACH

1. User Input

User shares travel details (destination, budget, dates, interests).

2. Agent Processing

TravAI uses IBM Watsonx AgentLab and Granite-3B model to process input.

3. Prompt Execution

Structured prompt guides the model to generate travel suggestions.

4. Response Generation

AI responds with itinerary, transport, stay options, and weather tips.

5. Output Delivery

Agent replies in real time using FinalAnswer() wrapped responses.

TECHNOLOGY USED

- **IBM Cloud Lite Services**

Used to build and deploy the AI agent for free using IBM's cloud infrastructure.

- **IBM Watsonx AgentLab**

Designed and tested TravAI as a conversational agent with defined behavior and actions.

- **IBM Granite 3B Instruct Model**

Powered the natural language understanding and generation to interpret user input and create travel suggestions.

- **Prompt Engineering**

Carefully crafted prompts to ensure correct responses and avoid model errors.

- **Rule-based Planning Logic**

Incorporated fallback logic for simulating travel suggestions, weather, and budget estimation without external APIs.

IBM CLOUD SERVICES USED

- - IBM Watsonx AI Studio
- - IBM Watsonx AgentLab
- - IBM Granite LLM (granite-3-3b-instruct)
- - IBM Cloud Prompt Lab (for testing)
- - IBM Cloud Lite account (Free Tier)

WOW FACTOR

- - A fully conversational AI agent that acts as a virtual travel buddy
- - Offers personalized itineraries based on budget, interests, and weather
- - Simulates real-time planning without external API dependencies
- - Simple interface, scalable through IBM Cloud
- - Fast deployment using AgentLab's visual flow setup

END USERS

- - Students planning vacations or study tours
- - Solo travelers and backpackers
- - Budget-conscious tourists
- - Casual users exploring quick trip ideas
- - Travel enthusiasts
- - Travel agencies for demo or testing use

DEPLOYMENT

TravAI – Your Smart Travel Planner ✓ Deployed Online

API reference

Test

Preview

New chat +

Quick start samples

Can you help me plan a budget-friendly trip?



Suggest top destinations for a 5-day vacation.



Find me a place to stay and things to do in Goa.



What's the weather like in Manali next week?



Type something...



About this deployment ×

Name



TravAI – Your Smart Travel Planner

Description



I'm your AI travel buddy – here to plan trips, suggest places, and guide you every step of the way!

Deployment Details

Deployment ID: a4eec5bc-09a3-4d...

Serving name:



No serving name.

Software specification:



runtime-24.1-py3.11

Hardware specification:



Extra extra small: 1 CPU and 2 GB RAM

Copies:



1

Tags



wx-agent

Associated asset



TravAI – Your Smart Travel Planner

RESULTS



TravAI – Your Smart Travel Planner 10:43 PM

Welcome to TravAI – Your Smart Travel Planner

I'm your AI travel buddy — here to plan trips, suggest places, and guide you every step of the way!



Type something...



RESULTS



You 11:02 PM

Can you help me plan a budget-friendly trip?



TravAI – Your Smart Travel Planner 11:02 PM

Here are some tips for planning a budget-friendly trip:

1. Plan trips around cheap flight prices.
2. Make a swap for a free stay.
3. Head to the great outdoors.
4. Don't settle for high rental-car costs.
5. Use travel tools and widgets to estimate, plan, and track your travel expenses.
6. Consider traveling during the low season and avoiding popular tourist areas.
7. Opt for budget-friendly accommodations like hostels or guesthouses.

Type something...



RESULTS

TravAI – Your Smart Travel Planner ✓ Deployed Online

API reference

Test

Preview

[New chat](#) +



You 11:04 PM

Suggest top destinations for a 5-day vacation.



TravAI – Your Smart Travel Planner 11:04 PM

Based on the search results, the top destinations for a 5-day vacation are:

1. Traverse City, Michigan
2. Vermont
3. Providence, Rhode Island
4. Ireland
5. Chicago
6. Yellowstone and Grand Teton National Parks
7. Savannah, Georgia

Type something...



RESULTS

[Deployment spaces](#) / [TravAI Deployment](#) / [TravAI – Your Smart Travel Planner](#) /



TravAI – Your Smart Travel Planner ✓ Deployed Online

API reference

Test

Preview

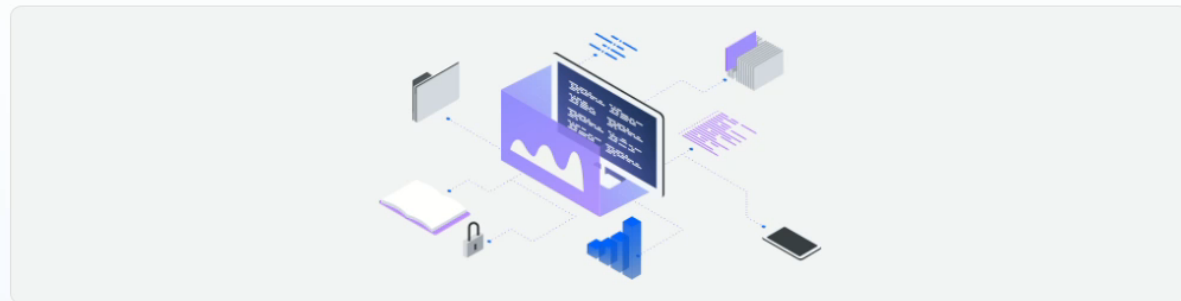
New chat +



TravAI – Your Smart Travel Planner 11:07 PM

Welcome to TravAI – Your Smart Travel Planner

I'm your AI travel buddy – here to plan trips, suggest places, and guide you every step of the way!



Type something...



FUTURE SCOPE

- - Integration with real-time booking APIs (Flights, Hotels)
- - Voice-based assistant interface (for mobile users)
- - Regional language support
- - Real weather and map APIs for real-time data
- - Travel safety alerts and visa info for international travel

CONCLUSION

- TravAI simplifies and personalizes the travel planning experience using IBM Granite and Watsonx AgentLab.
- It acts as a smart virtual travel buddy that understands user needs and delivers instant, helpful responses.
- With natural language interaction, TravAI reduces the time, confusion, and effort involved in planning a trip.
- It simulates weather, recommends destinations, and creates itineraries—all in one place.
- TravAI showcases how AI can make everyday tasks like travel more efficient, engaging, and user-friendly.

IBM CERTIFICATION – GETTING STARTED WITH ARTIFICIAL INTELLIGENCE

In recognition of the commitment to achieve
professional excellence



Krishna Pratik

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/33f284c6-ae0f-4ce4-a235-39dade16161b>



IBM CERTIFICATION – JOURNEY TO CLOUD

In recognition of the commitment to achieve
professional excellence



Krishna Pratik

Has successfully satisfied the requirements for:

Journey to Cloud: Envisioning Your Solution



Issued on: Jul 21, 2025
Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/a765c09a-1467-44da-9b5c-c5014ab0e524>



IBM CERTIFICATIONS – RAG LAB

IBM **SkillsBuild**

Completion Certificate



This certificate is presented to

Krishna Pratik

for the completion of

**Lab: Retrieval Augmented Generation with
LangChain**

(ALM-COURSE_3824998)

According to the Adobe Learning Manager system of record

Completion date: 26 Jul 2025 (GMT)

Learning hours: 20 mins

GITHUB LINK

- Github Link :- <https://github.com/Krishna-Pratik/TravAI-Agent-AI>

THANK YOU

*Thank
You!*