
CAPSTONE PROJECT

TRAVEL PLANNER AGENT

Presented By:

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 GitHub Repository:

<https://github.com/Priyanka2903184/TravelPlannerAgent>

OUTLINE

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- Proposed System/Solution
- System Development Approach
- Algorithm & Deployment
- Result (Output Image)
- Conclusion
- Future Scope
- References

PROBLEM STATEMENT

Today, many travelers struggle to plan personalized, cost-effective, and location-specific itineraries. Manually gathering information about places to visit, budget hotels, and local food can be time-consuming. There is a need for a smart travel assistant that can generate dynamic travel plans based on user preferences like destination, number of days, and budget.

PROPOSED SOLUTION

The proposed solution is an AI-based **Travel Planner Agent** built using **IBM Watsonx Prompt Lab**.

Key Features:

- Uses foundation model : **granite-3-8b-instruct**
- Takes 3 inputs: **Destination, Days, Budget**
- Generates a structured travel plan including:
 - Day-wise sightseeing
 - Budget hotel options
 - Local food suggestions

No-code setup using Prompt Lab enables fast development and easy experimentation with structured prompts.

SYSTEM APPROACH

- Platform: IBM Watsonx Studio (Lite Plan)
- Tools: Prompt Lab (Structured Mode)
- Foundation Model: granite-3-8b-instruct
- No-code/low-code interface
- Input Variables: destination, days, budget
- Output: Complete itinerary in response form

ALGORITHM & DEPLOYMENT

- **Prompt Engineering** (No coding):
 - Structured prompt created using variables and few-shot examples
 - Tested with various cities and budgets
- **Deployment:**
 - Deployed and tested live within Watsonx Studio
 - Ready-to-run without backend server

RESULT

IBM watsonx

Upgrade ?

Priyanka Karale's Account

Dallas

PK

Projects / TravelPlannerAgent / travelagent

AI guardrails on

New prompt +

AI Model: granite-3-8b-instruct

ChatStructuredFreeform

Set up

Instruction (optional)

Generate a 4-day itinerary. Be concise. Use bullets. Stay under 400 tokens.

Examples (optional)

Input:	Output:
Destination: Goa Budget: ₹10,000	3-Day Itinerary for Goa under ₹10,000 Day 1:...

Add example +

Try

Test your prompt

Input:	Output:
Create a 4-day travel plan for Manali under ₹12,000. Give Day 1 and Day 2 only.	2-Day Itinerary for Manali under ₹12,000 Day 1: - Arrival in Manali by train
Create a 2-day travel plan for Mumbai under ₹2,000. Give Day 1 and Day 2 only.	2-Day Mumbai Itinerary under ₹2,000 Day 1: - Arrival in Mumbai by train

New test +

Clear output

Generate

23°C Mostly cloudy

Search

ENG IN

22:46 02-08-2025

RESULT

IBM watsonx

Upgrade ? 🔔 Priyanka Karale's Account ▾ Dallas ▾ PK ⋮

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AI guardrails on ⚙️ 📄 ▾ New prompt + 🔒 ⓘ

Chat Structured Freeform AI Model: granite-3-8b-instruct ▾ {#} TXT </> 🔗







Examples (optional) ⓘ

Input:	Output:
Destination: Goa Budget: ₹10,000	3-Day Itinerary for Goa under ₹10,000 📌 Day 1: - Arrival in Goa by train - Visit: Calangute Beach, Baga Beach - Food: Veg Thali at Fisherman's Wharf (₹250) - Stay: Guesthouse in Calangute (₹1,000) 📌 Day 2: - Visit: Fort Aguada, Sinquerim Beach - Food: Goan Fish Curry at Ritz Classic (₹400) - Local transport by bus (₹100) and so on.... Approximate Total: ₹9,500
Create a 4-day travel plan for Manali under ₹12,000. Give Day 1 and Day 2 only.	2-Day Itinerary for Manali under ₹12,000 📌 Day 1:...
Create a 2-day travel plan for Mumbai under ₹2,000. Give Day 1 and Day 2 only.	2-Day Mumbai Itinerary under ₹2,000 📌 Day 1:...

Add example + 🗑️

Try ^

RESULT

Input:	Output:
Destination: Goa Budget: ₹10,000	 3-Day Itinerary for Goa under ₹10,000  Day 1:...
Create a 4-day travel plan for Manali under ₹12,000. Give Day 1 and Day 2 only.	 2-Day Itinerary for Manali under ₹12,000  Day 1: <ul style="list-style-type: none">- Arrival in Manali by train- Visit: Hadimba Temple, Mall Road- Food: Veg Thali at The Old Manali (₹200)- Stay: Budget hotel in Manali (₹1,500)  Day 2: <ul style="list-style-type: none">- Visit: Solang Valley, Rohtang Pass- Food: Maggie at Maggie Point (₹100)- Local transport by taxi (₹1,000)  Approximate Total: ₹10,200 (Note: The remaining 2 days can be planned similarly, considering local transport, food, and accommodation costs.)

CONCLUSION

- Successfully built a Travel Planner using Watsonx Prompt Lab
- Project meets all challenge requirements
- Simple no-code deployment
- Easily scalable and customizable for any location or travel style

FUTURE SCOPE

- Add support for real-time hotel and flight API integration
- Extend prompt to multi-user chatbot interface
- Integrate with Google Maps for location linking
- Use Agent Lab or RAG with travel knowledge base

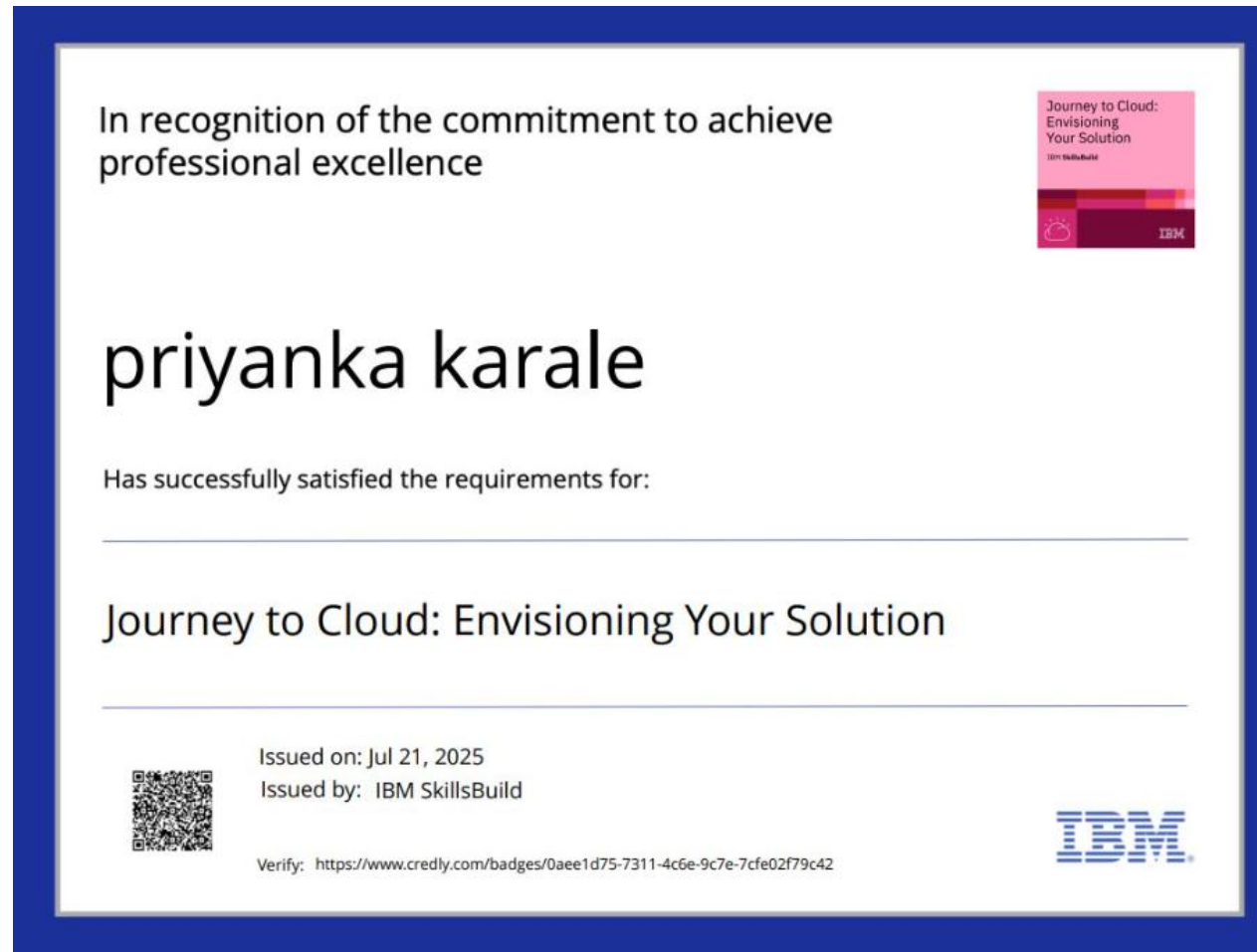
REFERENCES

- IBM Watsonx Studio: <https://dataplatform.cloud.ibm.com/>
- IBM Granite Models
- Prompt Engineering Guidelines (IBM docs)
- Tourism Boards (for test data)

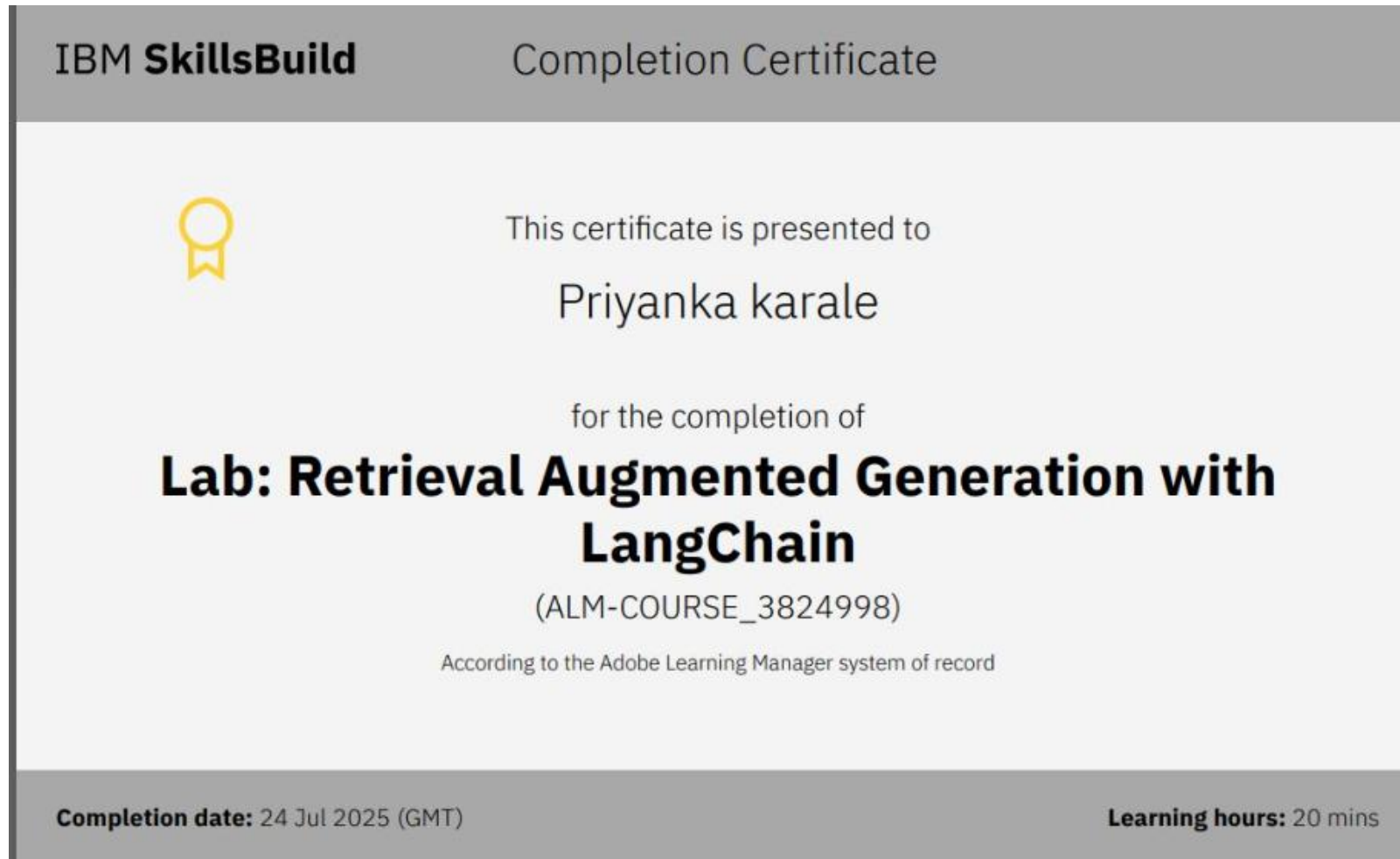
IBM CERTIFICATIONS



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THANK YOU