
CAPSTONE PROJECT

TRAVEL PLANNER AGENT

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OUTLINE

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- ❏ **Technology used**
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- ❏ **End users**
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PROBLEM STATEMENT

Travelers often face difficulties in planning their trips efficiently. Selecting destinations, creating day-wise itineraries, estimating budgets, and finding local attractions or activities require browsing multiple websites and applications. This manual process is time-consuming, prone to errors, and can lead to incomplete or poorly organized travel plans, reducing the overall travel experience.

Proposed Solution

An AI-powered Travel Planner Agent built using IBM Watsonx.ai that interacts with users to collect essential travel details such as destination, dates, and budget. The agent automatically generates personalized itineraries, suggests popular attractions, recommends budget-friendly tips, and enhances the trip-planning experience. By automating the planning process, the solution saves time, reduces effort, and provides travelers with accurate and well-organized travel plans.

TECHNOLOGY USED

- ❓ IBM Cloud Lite Services
- ❓ Natural Language Processing(NLP)
- ❓ Large Language Processing(LLM)
- ❓ Python / REST API for testing
- ❓ IBM Granite model.

IBM CLOUD SERVICES USED

- IBM Watsonx.ai Studio
- IBM Watsonx.ai Agent Lab
- IBM Cloud Object Storage
- IBM Cloud service
- IBM Cloud Watsonx.ai runtime

WOW FACTORS

This AI Travel Planner Agent revolutionizes the way trips are planned by automating destination selection, itinerary creation, and budget estimation. It significantly reduces the effort and time required for travel planning while enhancing the overall experience with personalized recommendations. Users receive ready-to-use itineraries, travel tips, and activity suggestions without browsing multiple platforms.

Unique Features:

- 🔍 **Personalized Itineraries:** Generates day-wise travel plans based on destination, duration, and budget
- 🔍 **Budget Optimization:** Suggests cost-effective accommodations and activities
- 🔍 **Tourist Spot Recommendations:** Highlights local attractions and must-visit places
- 🔍 **Instant Planning:** Provides ready trip plans in seconds, saving hours of manual research
- 🔍 **Cloud-based AI Deployment:** Accessible anywhere, anytime, with IBM Watsonx.ai
- 🔍 **Future Expansion:** Can integrate live weather, flight booking, and hotel APIs for smart travel assistance

END USERS

- 📄 Tourists and Travelers
- 📄 Travel Agencies
- 📄 Event Organizers
- 📄 Students & Professionals planning trips

SET-UP

IBM watsonx

Projects / Travel planner / Travel Agent

Build

AI Model: llama-3-3-70b-instruct

Setup

Name

Travel Agent

Description

68/100

Hii I am your Travel Planner Agent.
I can help you plan your trips.

Icon

Placeholder image

Quick start questions

Add up to 4 quick start questions that your users can select.

Agent instructions are unique to this agent and will affect its specific behavior.

You are a Travel Planner AI Agent.

Your purpose:

- Help users plan trips by suggesting destinations, itineraries, and budget tips.
- If the user gives only a destination, assume a 3-day trip and a ₹10,000 budget.

Response Rules:

1. Always reply with a short, human-friendly travel plan.
2. Include:
 - Destination
 - Suggested duration & budget
 - 2-3 activities or sightseeing spots
 - One short travel tip
3. Use emojis like ✈️, 🏖️, 🍹 to make responses engaging.
4. Do NOT show JSON, function calls, or tool outputs to the user.
5. If the user asks non-travel questions (like news, coding, math), reply:
"I can only help with travel planning, destinations, and itineraries."

TOOLS & TESTING

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Upgrade ⓘ 🔔

Ritika Rajwar's Account ▾ Dallas ▾ RR ⋮

Navigation Menu [Planner](#) / Travel Agent [Share feedback](#) ⓘ [Autosave on](#) [New agent +](#) [Deploy](#) 🔒 ⓘ

Build

AI Model: llama-3-3-70b-instruct ⚙️ ⏪

Tools

Add a tool Create custom tool

Added tools (5)

Google search

Retrieve information from the Internet with the Google search engine.

⚙️ 🗑️

DuckDuckGo search

Retrieve information from the Internet with the DuckDuckGo search engine.

🗑️

Wikipedia search

Retrieve information from Wikipedia articles.

⚙️ 🗑️

Webcrawler

Retrieve information from a website.

🗑️

Weather

Retrieve the weather of a city.

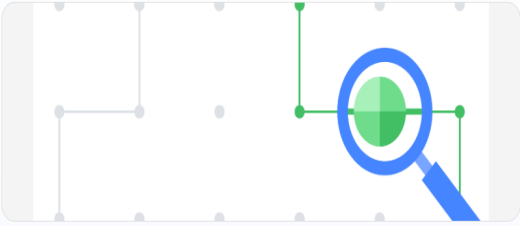
🗑️

Agent preview

Travel Agent 06:50 PM

Welcome to Travel Agent

Hi! I am your Travel Planner Agent. I can help you plan your trips.



Type something... 🔍 ➤

Build > Agent preview

RR You: 06:51 PM

hi plan a trip to manali

Travel Agent 06:51 PM

For a 3-day trip to Manali with a budget of ₹10000, you can consider the following itinerary:

Day 1: Arrival in Manali and check-in to a budget hotel. Visit the Solang Valley and enjoy adventure activities like skiing, snowboarding, or paragliding.

Day 2: Explore the town of Manali, visit the Hadimba Devi Temple, and take a stroll along the Mall Road. You can also visit the Manu Temple and the Vashisht Hot Water Springs.

Day 3: Take a day trip to the Rohtang Pass, which is about 51 km from Manali. Enjoy the scenic views and adventure activities like skiing, snowboarding, or trekking.

Budget Breakdown:

- Accommodation: ₹3000 - ₹4000 for 3 nights
- Food: ₹2000 - ₹3000 for 3 days
- Transportation: ₹1000 - ₹2000 for 3 days
- Activities: ₹1000 - ₹2000 for 3 days

Total: ₹7000 - ₹10000

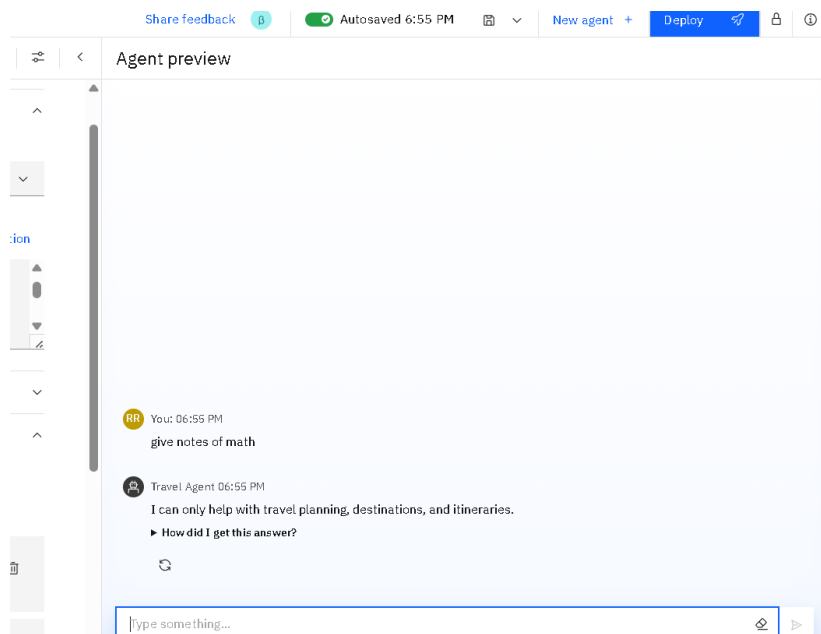
Note: The budget breakdown is an estimate and can vary depending on individual preferences and exchange rates.

It's always a good idea to research and book your accommodations, transportation, and activities in advance to get the best deals and avoid any last-minute hassles. Additionally, consider the weather and road conditions before

Type something...



TESTING:






DEPLOYMENT

[Deployment spaces](#) / [TravelPlanners](#) / Travel Agent

DeploymentsCodeSchema

Search

New deployment

Name	Type	Status	Tags	Last modified
 Travel Agent	Online	 Deployed	wx-agent 	3 days ago Ritika Rajwar (You)

DEPLOY AND API:

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Upgrade

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Dallas

PP

Deployment spaces / TravelPlanners / Travel Agent /

Travel Agent

Deployed Online

API reference

Test

Preview

Endpoints for inferencing

Private endpoint

Public endpoint

Learn more about the 2021-05-01 version query parameter

Code snippets

cURL

Java

JavaScript

Python

Scala

Bearer <token>

IAW

About this deployment

Name

Description

Deployment Details

Tags

Associated asset

Travel Agent

Hi I am your Travel Planner Agent. I can help you plan your trips.

Deployment ID: 28831ebb-a9ab-4699-bab8-98f97286da32

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: Travel Agent

11828f28-644c-44b5-a679-853dff26b865

RESULT:

IBM watsonx

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Dallas ▾

PR

⋮

Projects / Travel planner / Travel Agent

Share feedback ⓘ

📄 ▾

New agent +

Deploy

🔗

ⓘ

Build >

Agent preview

Travel Agent 06:59 PM

Welcome to Travel Agent

Hi! I am your Travel Planner Agent. I can help you plan your trips.



Type something...

🔍

➤

RESULT:

IBM watsonx

Upgrade ⓘ 🔔

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Share feedback ⓘ 📄 ⌵ New agent +

Build >

Agent preview

RR

You: 07:00 PM

plan a 3 day trip to manali

👤

Travel Agent: 07:00 PM

🌄 Let's plan a 3-day trip to Manali 🌄. Duration: 3 days Budget: ₹10,000 Activities:

- Visit the Solang Valley for adventure sports like paragliding and skiing 🧗
- Explore the ancient Hadimba Devi Temple 🏰
- Take a dip in the hot springs at Vashisht 🌊 Travel tip: Always carry warm clothes as the temperature can drop significantly at night ❄️.

▶ How did I get this answer?

RR

You: 07:00 PM

give a itinerary

👤

Travel Agent: 07:00 PM

🌄 Let's plan a 3-day trip to Manali 🌄. Duration: 3 days Budget: ₹10,000 Itinerary: Day 1:

RESULT:

Build > Agent preview

You: 07:00 PM
give a itinerary

Travel Agent 07:00 PM
 Let's plan a 3-day trip to Manali . Duration: 3 days Budget: ₹10,000 Itinerary: Day 1:

- Morning: Arrive in Manali and check-in to your hotel
- Afternoon: Visit the Hadimba Devi Temple and explore the nearby market
- Evening: Enjoy a relaxing walk along the Beas River Day 2:
- Morning: Visit the Solang Valley for adventure sports like paragliding and skiing
- Afternoon: Take a dip in the hot springs at Vashisht
- Evening: Explore the Mall Road and enjoy the local cuisine Day 3:
- Morning: Visit the Manu Temple and the nearby village
- Afternoon: Go trekking to the nearby hills or visit the Manali Wildlife Sanctuary
- Evening: Depart from Manali with memories of your trip Travel tip: Always carry warm clothes as the temperature can drop significantly at night .

CONCLUSION

- ❑ The agent can generate customized travel plans, suggest itineraries, and highlight key tourist attractions.
- ❑ Saves time by automating repetitive tasks like finding destinations, estimating budgets, and creating itineraries.
- ❑ Enhances efficiency and accuracy in trip planning for individuals, families, and travel agencies.
- ❑ Improves the travel experience by providing destination insights, activities, and quick travel tips.

FUTURE SCOPE

- ❑ Integration with live flight and hotel booking APIs
- ❑ Personalized itinerary generation using user preferences
- ❑ Real-Time Weather & Traffic Updates
- ❑ Multi-language travel assistance
- ❑ Voice-based travel planning assistant

IBM CERTIFICATIONS




IBM CERTIFICATIONS



IBM LAB CERTIFICATE

IBM SkillsBuild

Completion Certificate



This certificate is presented to

T Jyothinadh

for the completion of

Lab: Retrieval Augmented Generation with LangChain

(ALM-COURSE_3824998)

According to the Adobe Learning Manager system of record

Completion date: 15 Jul 2025 (GMT)

Learning hours: 20 mins

THANK YOU