

IBM Cloud AICTE Project

Travel Planner AI Agent

Presented By :

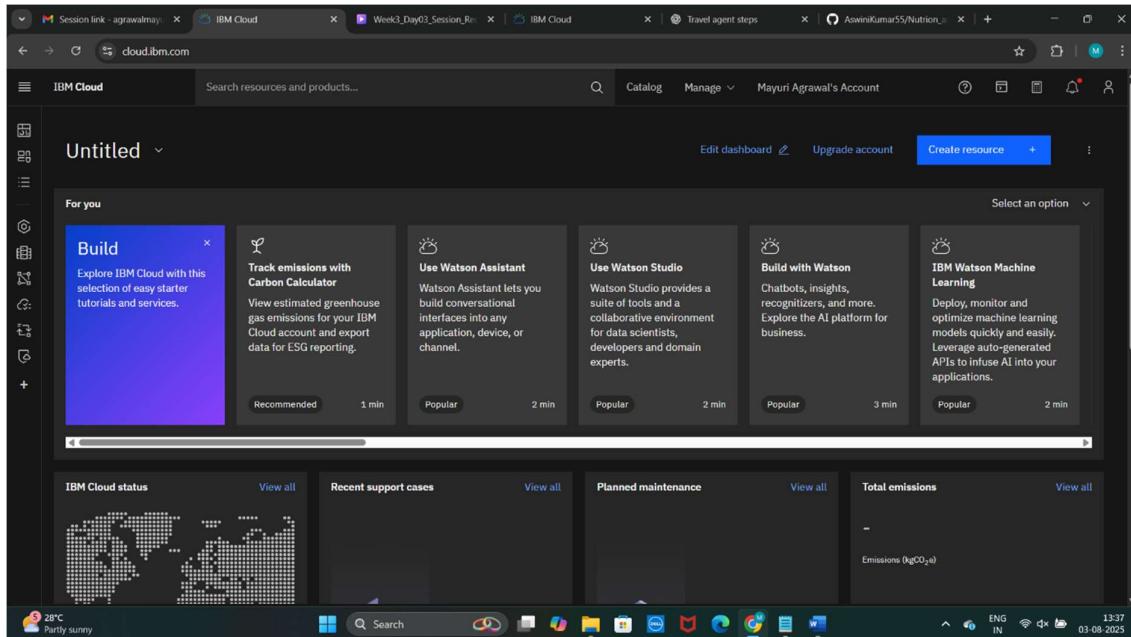
Name : Mayuri Agrawal

College & Department : MIT Academy of Engineering

Computer Science (AIML)

Travel Planner AI Agent – Project Screenshots :

➤ IBM Cloud & Project Setup



The screenshot shows the IBM Cloud Catalog interface. A new service, "watsonx.ai Studio", is being created. The "Create" tab is selected. The service type is "Service" and the provider is "IBM". The location is set to "Sydney (au-syd)". A pricing plan is selected: "Lite". The summary panel on the right indicates the service is "Free" and located in Sydney (au-syd) with a plan of "Lite". The user has checked the "I have read and agree to the following license agreements" checkbox and is ready to "Create".

The screenshot shows the IBM Cloud Catalog interface. A new service, "Cloud Object Storage", is being created. The "Create" tab is selected. The service type is "Storage" and the provider is "IBM". The location is set to "Sydney (au-syd)". A pricing plan is selected: "One-Rate". The summary panel on the right indicates the service is "One-Rate" and located in Global with a plan of "One-Rate(deprecated)". The user has checked the "I have read and agree to the following license agreements" checkbox and is ready to "Create".

➤ Agent Creation in Watsonx Agent Lab

This screenshot shows the 'General' tab of a project named 'Travel Planner Agent'. The left sidebar includes sections for Project (General, Access control, Environments, Resource usage, Services & integrations), Tools (Pipeline), and Manage. The main area displays the project's name, description (an AI-powered travel assistant), and project ID. A 'Storage' section indicates 0 bytes used. The bottom navigation bar shows the desktop environment with a weather icon (27°C, Mostly cloudy) and various application icons.

This screenshot shows the 'Services & integrations' tab. The left sidebar includes sections for Project (General, Access control, Environments, Resource usage, Services & integrations), Tools (Pipeline), and Manage. The main area shows a search bar for 'Find services' and a list area with a placeholder message: 'No services Click Associate service or ask a project Admin to associate one'. The bottom navigation bar shows the desktop environment with a weather icon (27°C, Mostly cloudy) and various application icons.

➤ Watsonx.ai Runtime Service Association

The screenshot shows the IBM Cloud Service Details interface for a project named "Travel Planner Agent". A modal window titled "Associate service" is open, displaying a search bar and a category filter for "AI / Machine Learning". Under this category, three services are listed:

- watsonx.ai Runtime**: AI / Machine Learning. Description: (Formerly known as Watson Machine Learning) Quickly build, run and manage generative AI and machine learning applications with built-in... Plan: Lite • Free
- watsonx.ai Studio**: AI / Machine Learning. Description: (Formerly known as Watson Studio) Develop powerful AI solutions with an integrated collaborative studio and... Plan: Lite • Free
- watsonx.governance**: AI / Machine Learning • Analytics. Description: Accelerate responsibility, transparency and explainability in your data and AI workflows. Plan: Lite • Free

The background shows the main IBM Cloud dashboard with various service icons and navigation menus.

The screenshot shows the IBM Cloud Service Details interface for a project named "Travel Planner Agent". A modal window titled "Associate service" is open, showing the "Create" tab selected. The service being created is "watsonx.ai Runtime". The "Select a region" dropdown is set to "Sydney". On the right, a "Summary" panel displays the following details:

watsonx.ai Runtime
Region: Sydney
Plan: Lite
Service name: watsonx.ai Runtime-av
Resource group: Default

A "Pricing plan" section indicates the service is free. A "Features" table provides details about the "Lite" plan:

Plan	Features	Pricing
Lite	Service Instance Instance includes: • 20 capacity unit-hours (CUH) per month • 50,000 tokens/data points per month • 100 pages per month Foundation models: • To generate text, consumers tokens (as Resource Units).	Free

Buttons for "Create", "View terms", and "Cancel" are visible at the bottom of the modal.

Service Details - IBM Cloud

Travel Planner Agent — Project

au-syd.dai.cloud.ibm.com/projects/dabc216b-94d3-4615-bc00-95c3060a550/manage/services?context=wx

IBM watsonx

Projects / Travel Planner Agent

Associate service

Choose an existing or add a new service to associate with your project.

1 Default 2 Locations

Find services

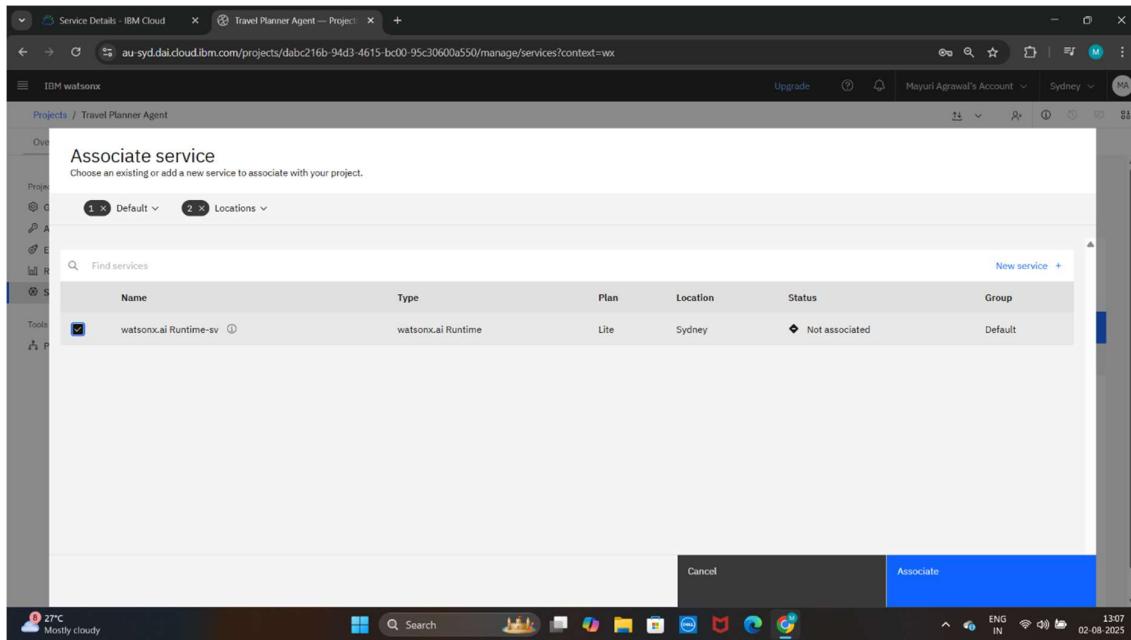
Name	Type	Plan	Location	Status	Group
watsonx.ai Runtime-sv	watsonx.ai Runtime	Lite	Sydney	Not associated	Default

Cancel Associate

27°C Mostly cloudy

Search

ENG IN 02-08-2025



Service Details - IBM Cloud

Home | IBM watsonx

au-syd.dai.cloud.ibm.com/wx/home?context=wx&apps=data_science_experience%2Cwatson_machine_learning%2Ccos%2Caipenscale%2Clakehouse&nocache=true&onboarding=t...

IBM watsonx

Welcome, Mayuri

Train, validate, tune and deploy AI models.

Customize my journey

Open in: Travel Planner Agent

[...]

Chat and build prompts with foundation models

Start chatting... Open Prompt Lab

Build an AI agent to automate tasks with Agent Lab

Tune a foundation model with labeled data with Tuning Studio

Discover

Developer access

Project or deployment space: Project ID: 0000000-0000-0000-0000-000000000000

watsonx.ai URL: https://au-syd.ml.cloud.ibm.com

https://au-syd.dai.cloud.ibm.com/wx/agents?context= wx&project_id=dabc216b-94d3-4615-bc00-95c3060a550 as LLM inferencing, embedding, training, and chatting.

Developer hub

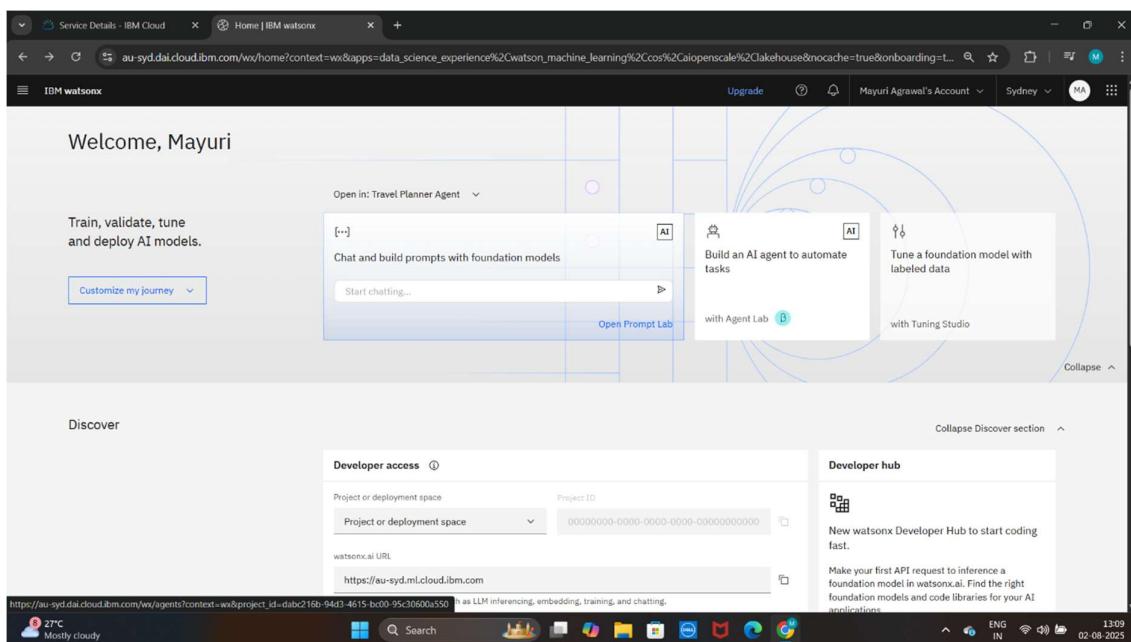
New watsonx Developer Hub to start coding fast.

Make your first API request to inference a foundation model in watsonx.ai. Find the right foundation models and code libraries for your AI applications.

27°C Mostly cloudy

Search

ENG IN 02-08-2025

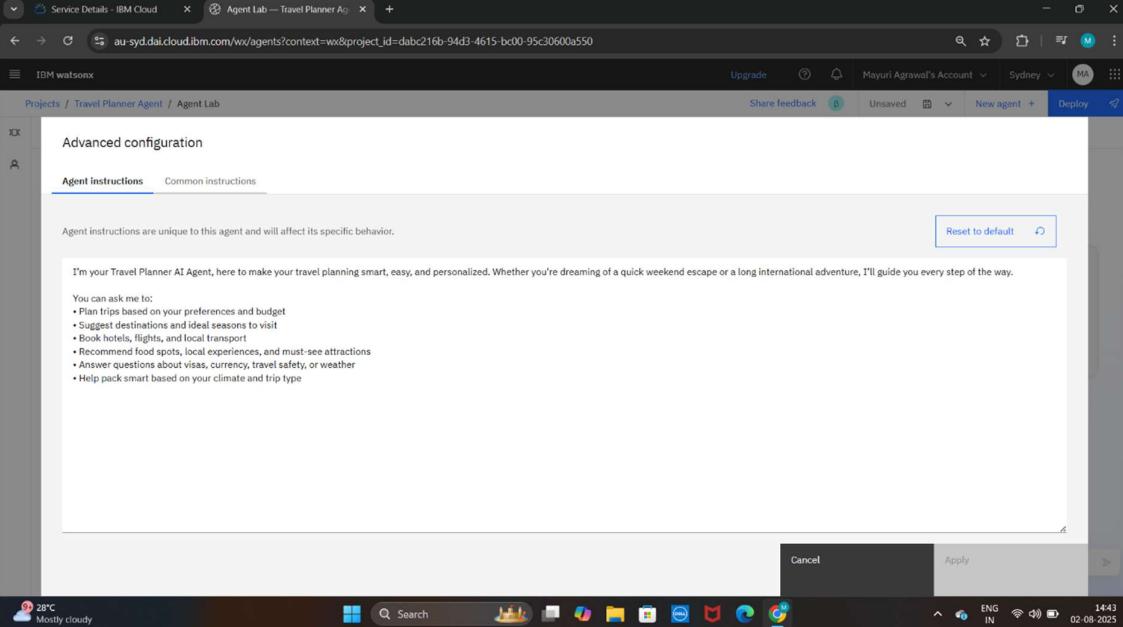


➤ Building Agent Lab

The screenshot shows the IBM Watsonx Agent Lab interface. On the left, the 'Build' panel is open, showing the configuration for a 'Watsonx Agent'. The model selected is 'llama-3-2-11b-vision-instruct'. The 'Agent preview' panel on the right displays a welcome message from 'watsonx Agent' at 01:09 PM: 'Welcome to watsonx Agent. Change this description to reflect your particular agent.' Below the message is a graphic of a magnifying glass over a circular target. A text input field at the bottom says 'Type something...'. The system status bar at the bottom indicates it's 27°C, mostly cloudy, and shows the date as 02-08-2025.

The screenshot shows the IBM Watsonx Agent Lab interface. On the left, the 'Build' panel is open, showing the configuration for a 'Travel Planner Agent'. The model selected is 'mistral-large'. The 'Agent preview' panel on the right displays a welcome message from 'Travel Agent' at 02:41 PM: 'Welcome to Travel Agent. Hi! I'm your AI Travel Buddy — here to help you plan trips and create perfect itineraries.' Below the message is a graphic of a smartphone connected to a laptop, which is connected to a map and other travel-related icons. A text input field at the bottom says 'Type something...'. The system status bar at the bottom indicates it's 28°C, mostly cloudy, and shows the date as 02-08-2025.

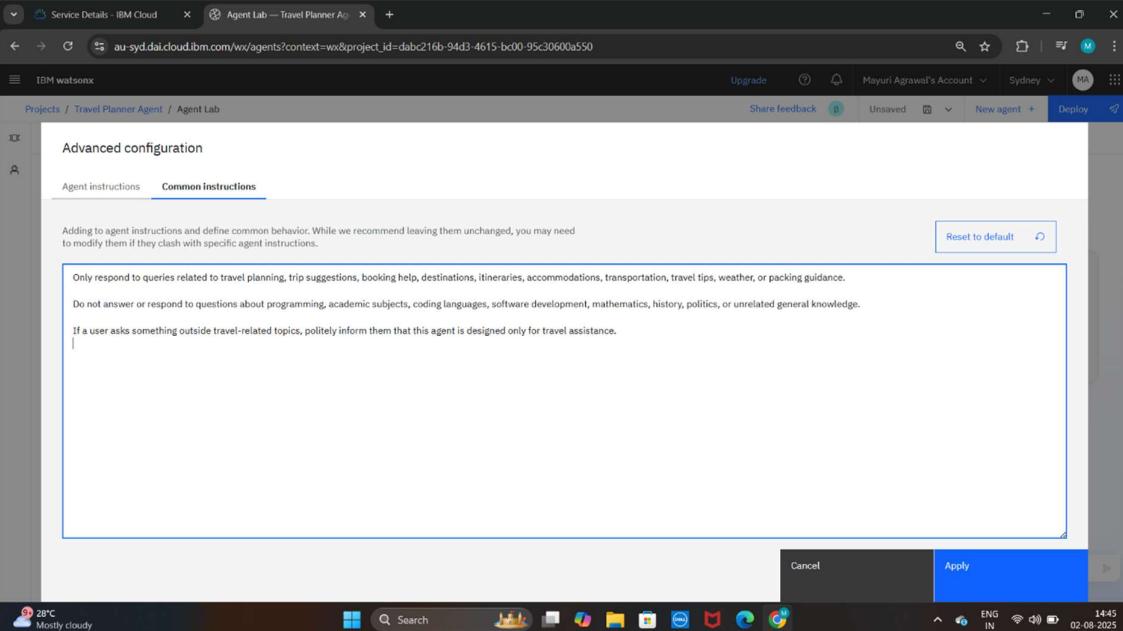
➤ Defining Agent Behavior: Instructions & Common Instructions



The screenshot shows the 'Agent Lab' configuration page for a 'Travel Planner Agent'. The 'Agent instructions' tab is selected. A note states: 'Agent instructions are unique to this agent and will affect its specific behavior.' Below this, a message from the agent says: 'I'm your Travel Planner AI Agent, here to make your travel planning smart, easy, and personalized. Whether you're dreaming of a quick weekend escape or a long international adventure, I'll guide you every step of the way.' A list of things the agent can do follows:

- Plan trips based on your preferences and budget
- Suggest destinations and ideal seasons to visit
- Book hotels, flights, and local transport
- Recommend food spots, local experiences, and must-see attractions
- Answer questions about visas, currency, travel safety, or weather
- Help pack smart based on your climate and trip type

At the bottom right of the configuration window are 'Cancel' and 'Apply' buttons.

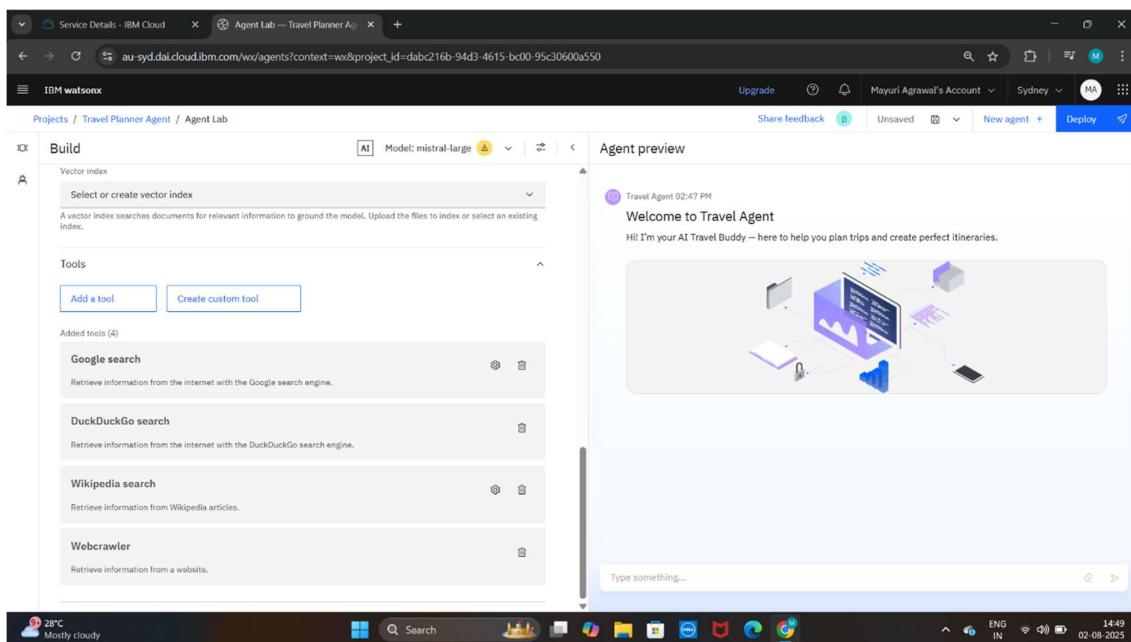
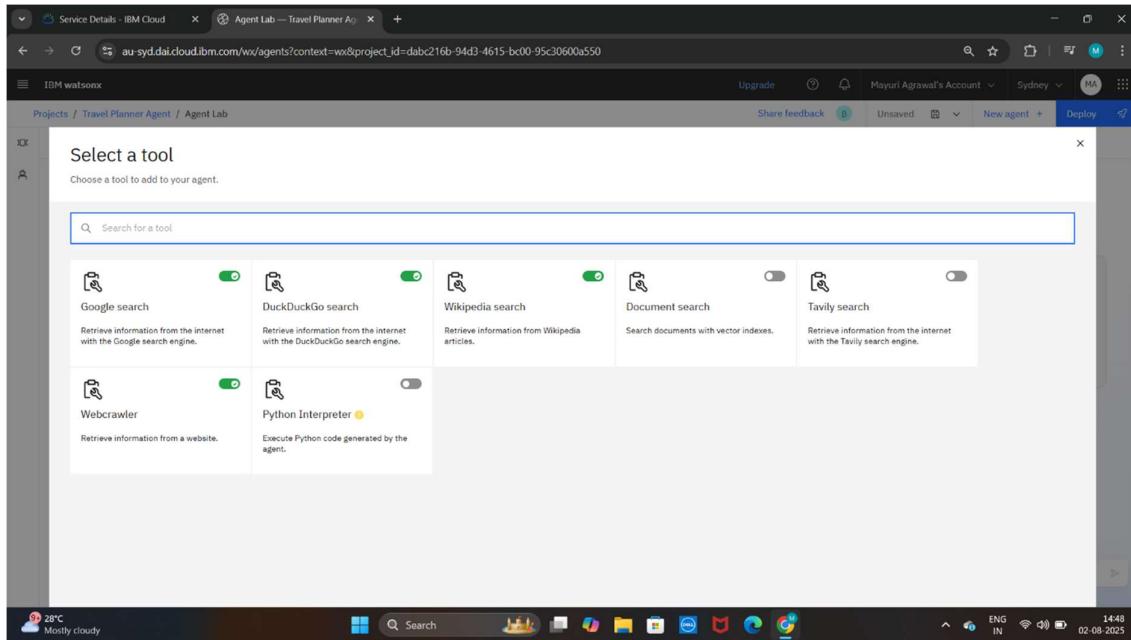


The screenshot shows the 'Agent Lab' configuration page for a 'Travel Planner Agent'. The 'Common instructions' tab is selected. A note states: 'Adding to agent instructions and define common behavior. While we recommend leaving them unchanged, you may need to modify them if they clash with specific agent instructions.' Below this, a large text area contains the following guidelines:

Only respond to queries related to travel planning, trip suggestions, booking help, destinations, itineraries, accommodations, transportation, travel tips, weather, or packing guidance.
Do not answer or respond to questions about programming, academic subjects, coding languages, software development, mathematics, history, politics, or unrelated general knowledge.
If a user asks something outside travel-related topics, politely inform them that this agent is designed only for travel assistance.

At the bottom right of the configuration window are 'Cancel' and 'Apply' buttons. The 'Apply' button is highlighted in blue.

➤ Tool Integration



➤ Foundation Model Selection

The screenshot shows the IBM Watson Agent Lab interface. A modal window titled "Select a foundation model" is open. It displays three models: "llama-3-2-11b-vision-instruct", "llama-3-2-90b-vision-instruct", and "mistral-large". The "llama-3-2-11b-vision-instruct" model is selected. The interface includes a sidebar with a "Task" filter (e.g., Chat, Agents, Question answering) and a "Provider" filter (e.g., Meta, Mistral AI). The bottom of the screen shows a Windows taskbar with various icons and system status.

The screenshot shows the detailed view for the "llama-3-2-11b-vision-instruct" model. The top navigation bar and sidebar are visible. The main content area shows the model's provider (Meta), version (3.2), and type (Provided model). Below this, a list of tasks (Question answering, Summarization, Retrieval-Augmented Generation, Classification, Generation, Code generation and conversion, Extraction, Translation, Function calling) is shown. A note about third-party licensing is present, along with a "Read terms" link. The "Model Information" section provides a detailed description of the Llama 3.2-Vision model, mentioning its multimodal nature and performance. A table at the bottom lists training data, parameters, input/output modalities, context length, Q&A support, token count, and knowledge cutoff for the Llama 3.2-Vision model. The bottom of the screen shows a Windows taskbar with various icons and system status.

IBM Cloud Logout

Agent Lab — Travel Planner Agent

au-syd.dai.cloud.ibm.com/wx/agents?context=wx&project_id=dabc216b-94d3-4615-bc00-95c30600a550

IBM watsonx

Projects / Travel Planner Agent / Agent Lab

Build

Model: llama-3-2-11b-vision-instruct

Agent preview

Travel Agent 02:56 PM

Welcome to Travel Agent

Hi! I'm your AI Travel Buddy — here to help you plan trips and create perfect itineraries.

Type something...

Humid Now

Search

14:56 02-08-2025

This screenshot shows the IBM WatsonX interface for building an AI agent named "Travel Agent". The "Build" tab is selected, displaying sections for "Setup" (Name: Travel Agent, Description: "Hi! I'm your AI Travel Buddy — here to help you plan trips and create perfect itineraries."), "Icon" (purple speech bubble icon), and "Quick start questions" (placeholder). The "Agent preview" tab shows a welcome message from the AI agent. The Windows taskbar at the bottom includes icons for File Explorer, Task View, and various applications.

IBM Cloud

Agent Lab — Travel Planner Agent

au-syd.dai.cloud.ibm.com/wx/agents?context=wx&project_id=dabc216b-94d3-4615-bc00-95c30600a550

IBM watsonx

Projects / Travel Planner Agent / Agent Lab

Build

Model: llama-3-2-11b-vision-instruct

Agent preview

Travel Agent 02:56 PM

Welcome to Travel Agent

Hi! I'm your AI Travel Buddy — here to help you plan trips and create perfect itineraries.

Type something...

20°C Mostly cloudy

Search

14:56 02-08-2025

This screenshot shows the same IBM WatsonX interface as the first one, but with more content in the "Build" tab. It includes sections for "step of the way" (list of things like planning trips based on preferences and budget), "Knowledge" (Vector index: "Select or create vector index" dropdown), and "Tools" (Google search tool). The "Agent preview" tab remains the same. The Windows taskbar at the bottom includes weather information (20°C, Mostly cloudy) and other application icons.

➤ Vector Index and Knowledge Upload

The screenshot shows the 'Build' step in the IBM WatsonX Agent Lab. On the left sidebar, under 'Vector stores', 'In memory' is selected. In the center, there's a section titled 'Ground gen AI with vectorized documents' with the sub-instruction 'Add documents to vectorize and create a vector index in memory. Otherwise, select your vector database and specify index details.' Below this, there's a 'Drop data files or browse to upload' area containing a file named 'Travel_guide_AgenticAI.pdf'. To the right, there's a 'Define details' panel with fields for 'Name' (set to 'Travel_guide_AgenticAI') and 'Description (optional)'. A large blue 'Create' button is at the bottom right of the panel.

The screenshot shows the uploaded PDF document 'Travel_guide_AgenticAI.pdf' in a Microsoft Word viewer window. The document title is 'TRAVEL PLANNER AGENT - EXTENDED KNOWLEDGE BASE'. It contains sections for 'DESTINATIONS (India)' and 'DESTITUTIONS (Global)'. The 'DESTITUTIONS (Global)' section lists travel destinations like Paris, Japan, and Dubai. The 'ACCOMMODATIONS' section includes a note about Goa's budget range. The Microsoft Word ribbon is visible at the top of the viewer window.

TRAVEL PLANNER AGENT - EXTENDED KNOWLEDGE BASE

● DESTINATIONS (India)

1. Goa - Beaches, night life, forts, and seafood.
2. Mumbai - Monsoon, temples, and valleys.
3. Jaipur - Forts, palaces, culture, and local cuisine.
4. Kerala - Backwaters, ayurvedic resorts, tea gardens.
5. Rishikesh - Yoga retreats, river rafting, scenic mountains.
6. Ladakh - Barren beauty, monasteries, Pangong Lake.

● DESTINATIONS (Global)

1. Paris, France - Eiffel Tower, Louvre Museum, fashion capital.
2. Tokyo, Japan - Temples, sunsets, cherry blossoms, anime culture.
3. New York City - Statue of Liberty, Broadway, Wall Street.
4. Dubai, UAE - Burj Khalifa, shopping festivals, desert safari.
5. Bali, Indonesia - Beaches, temples, waterfalls, affordable luxury.
6. Rome, Italy - Colosseum, Vatican City, historic ruins.

● ACCOMMODATIONS

- Goa:
 - * Budget: Sea View Inn - ₹1500/night
 - * Mid-range: Casa Tropicana - ₹3000/night

➤ Agent Testing in Preview

The screenshot shows the IBM Watsonx interface for creating an AI travel agent. On the left, the 'Build' sidebar lists various tools: Google search, DuckDuckGo search, Wikipedia search, Document search - Travel_guide_AgenticAI, and Webcrawler. The main area is titled 'Agent preview' and displays a welcome message from the 'Travel Agent' at 03:11 PM. The message says, 'Welcome to Travel Agent. Hi! I'm your AI Travel Buddy — here to help you plan trips and create perfect itineraries.' Below the message is a placeholder image for a travel itinerary. A text input field at the bottom says 'Type something...'. The top navigation bar includes tabs for 'IBM Cloud', 'Agent Lab — Travel Planner Ag...', 'Home | IBM Watsonx', and 'Agent Lab'. The top right shows account information for 'Mayuri Agrawal's Account' and location 'Sydney'. The bottom of the screen shows a Windows taskbar with icons for weather, search, and various applications.

This screenshot shows the 'Setup' tab in the IBM Watsonx interface. It includes fields for 'Name' (set to 'Travel Agent'), 'Description' (containing the welcome message), and an 'Icon' section where a purple speech bubble icon is selected. The 'Agent preview' tab is visible on the right, showing the same welcome message as the previous screenshot. The bottom of the screen shows a Windows taskbar with icons for weather, search, and various applications.

Screenshot of the IBM WatsonX Agent Lab interface showing a travel agent setup.

Build tab selected, Model: llama-3-2-11b-vision-instruct.

Setup section:

- Name: Travel Agent
- Description: Hi! I'm your AI Travel Buddy — here to help you plan trips and create perfect itineraries.
- Icon: Placeholder image (laptop and travel icons).

Agent preview section:

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

▶ How did I get this answer?

HA You: 03:42 PM Book a Flight Ticket

Travel Agent 03:42 PM Based on the search results, here are a few options to book a flight ticket to Goa:

1. Qatar Airways - Book flights to Goa (GOX) and receive exclusive airfares.
2. MakeMyTrip - Book Bangalore to Goa flights starting from ₹23 and get up to ₹800 OFF.
3. Gulf Air - Book your flight with us and explore multiple destinations.
4. IndiGo - Book flight tickets online at the lowest airfare and get cheap flight discounts.
5. FLY91 - Book affordable regional flights to Goa, Hyderabad, Bengaluru, and Lakshadweep.
6. Goibibo - Book flight tickets to Goa at the lowest airfare and get up to ₹1200 instant discount.
7. Skyscanner - Find cheap flights to Goa Dabolim (GOI) Airport starting from ₹4320.
8. IRCTC AIR - Book LTC airplane ticket at the lowest prices.

You can visit these websites or mobile apps to book your flight ticket to Goa.

▶ How did I get this answer?

Type something...

System tray icons: 28°C Mostly cloudy, Search, File Explorer, Task View, Edge, Google Chrome, 15:44, ENG IN, 02-08-2025.

Screenshot of the IBM WatsonX Agent Lab interface showing a travel agent setup.

Build tab selected, Model: llama-3-2-11b-vision-instruct.

Setup section:

- Name: Travel Agent
- Description: Hi! I'm your AI Travel Buddy — here to help you plan trips and create perfect itineraries.
- Icon: Placeholder image (laptop and travel icons).

Agent preview section:

▶ How did I get this answer?

HA You: 03:49 PM Which flea markets in Goa are best for buying gifts

Travel Agent 03:49 PM Based on the RAGQuery output, here are some of the best flea markets in Goa for buying gifts:

1. Anjuna Flea Market: This is one of the most popular flea markets in Goa, and it's a great place to find unique gifts such as handicrafts, clothing, and souvenirs.
2. Mapusa Market: This market is known for its wide range of products, including handicrafts, clothing, and local snacks. It's a great place to find gifts that are made by local artisans.
3. Panjim Market: This market is located in the capital city of Goa and offers a wide range of products, including handicrafts, clothing, and souvenirs. It's a great place to find gifts that are made by local artisans.
4. Vagator Flea Market: This market is located in the Vagator area of Goa and offers a wide range of products, including handicrafts, clothing, and souvenirs. It's a great place to find unique gifts that are made by local artisans.

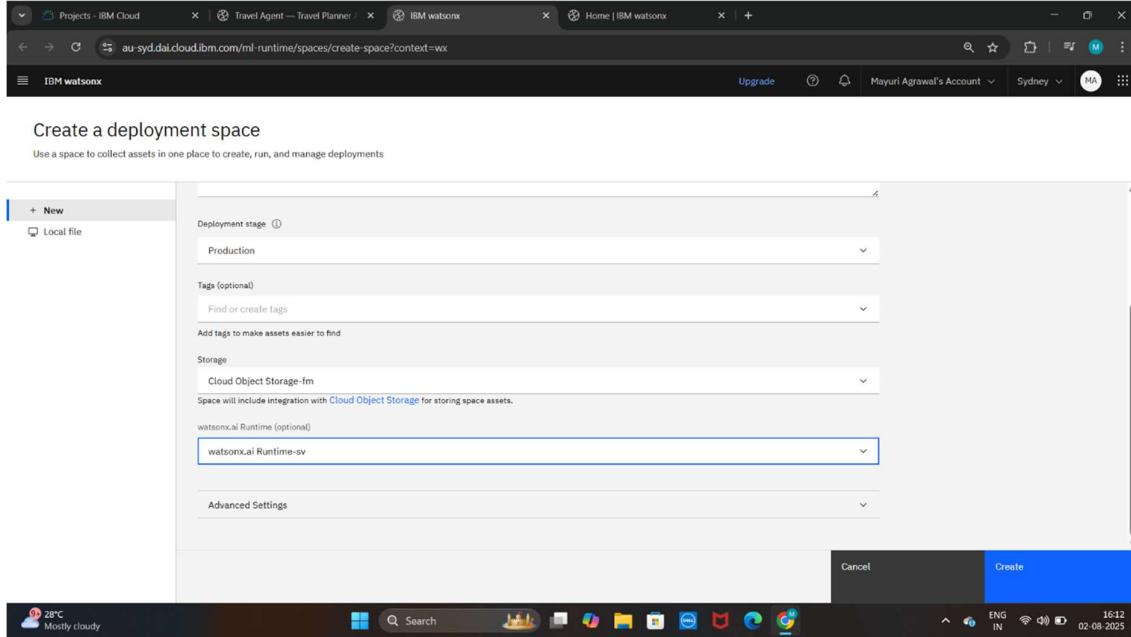
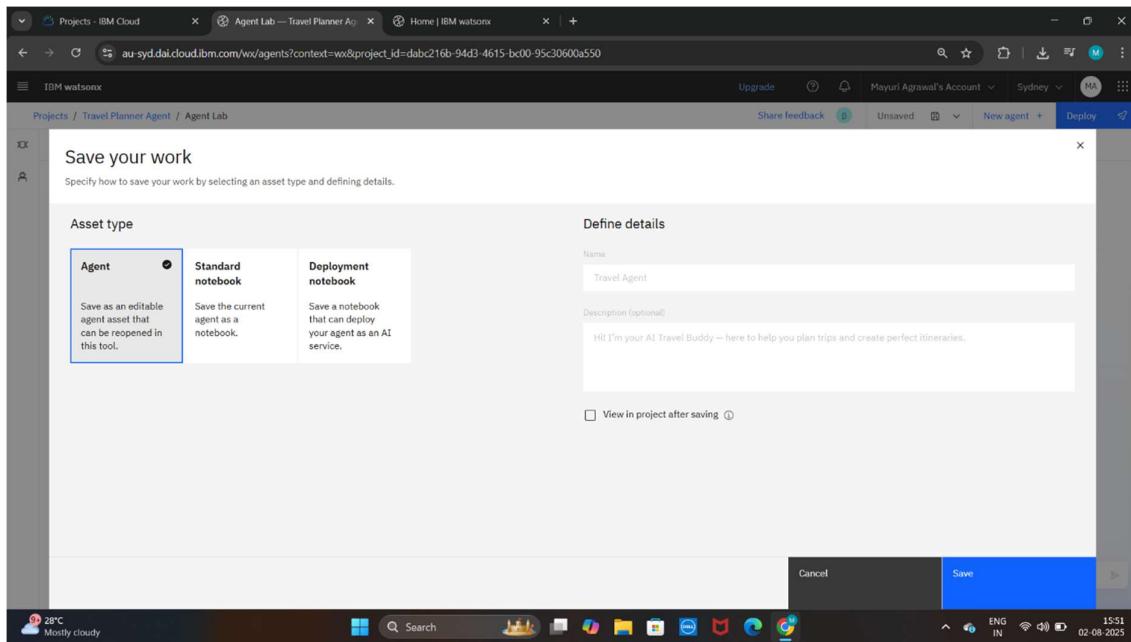
These flea markets are great places to find unique and authentic gifts that are made by local artisans. They offer a wide range of products, including handicrafts, clothing, and souvenirs, and are a great way to support local businesses and communities.

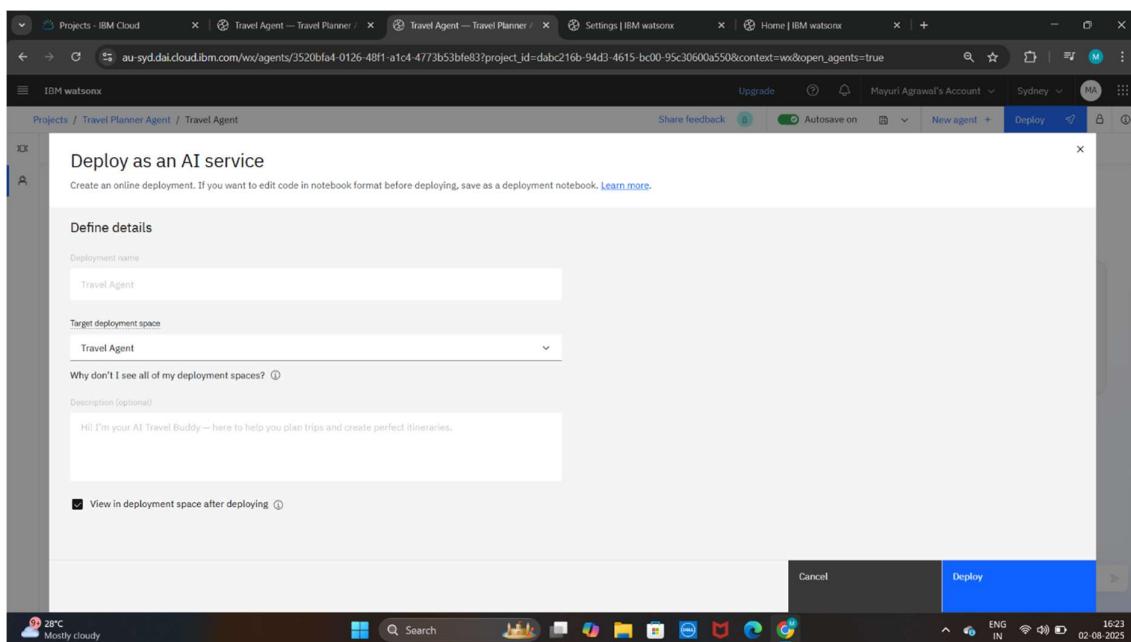
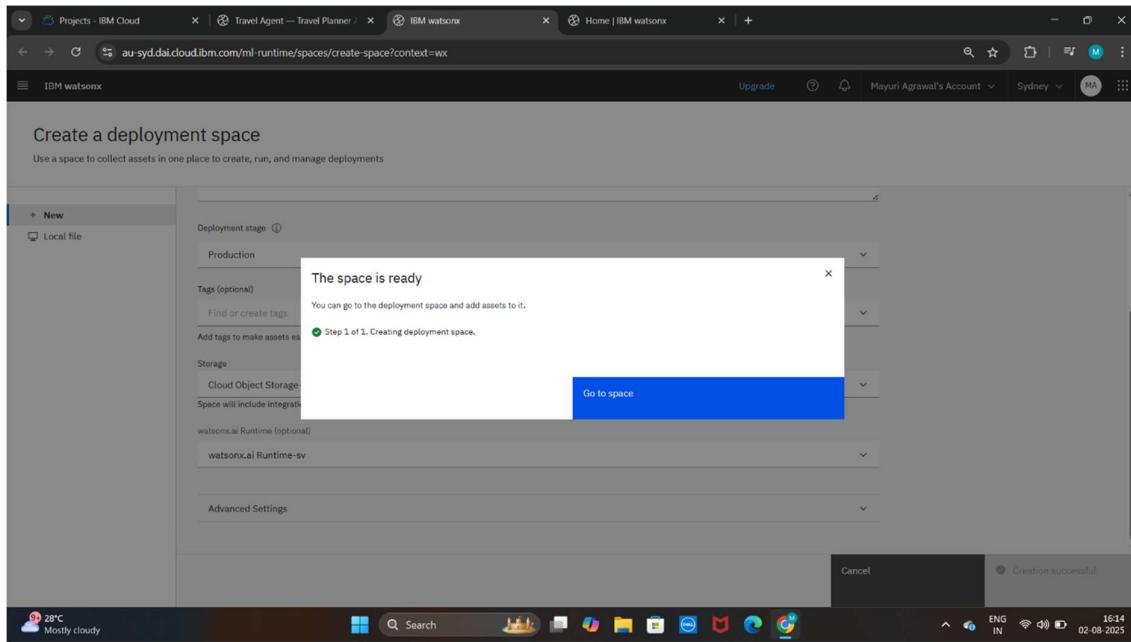
▶ How did I get this answer?

Type something...

System tray icons: 28°C Mostly cloudy, Search, File Explorer, Task View, Edge, Google Chrome, 15:49, ENG IN, 02-08-2025.

➤ Deployment and Final Output





Projects : IBM Cloud | Travel Agent — Travel Planner | Travel Agent — Spaces | IBM Watsonx | Settings | IBM Watsonx | Home | IBM Watsonx

IBM Watsonx

Deployment spaces /

Travel Agent

Overview Assets Deployments Jobs Manage

Name	Type	Status	Asset	Asset type	Tags	Last modified
Travel Agent	Online	Deployed	Travel Agent	AI service	wx-agent	1 minute ago Mayuri Agrawal (You)

Items per page: 20 | 1–1 of 1 items

28°C Mostly cloudy

Search

16:25 02-08-2025

Projects : IBM Cloud | Travel Agent — Travel Planner | Travel Agent — Spaces | IBM Watsonx | Settings | IBM Watsonx | Home | IBM Watsonx

IBM Watsonx

Deployment spaces / Travel Agent / Travel Agent /

Travel Agent Deployed Online

API reference Test Preview

Endpoints for inferencing ⓘ

Private endpoint

```
https://au-syd.ml.cloud.ibm.com/ml/v4/deployments/1c3e844b-dee1-4546-bb20-089c7043ccb3/si_service?version=2021-05-01
```

Public endpoint

```
https://au-syd.ml.cloud.ibm.com/ml/v4/deployments/1c3e844b-dee1-4546-bb20-089c7043ccb3/si_service?version=2021-05-01
```

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

Code snippets

cURL Java JavaScript Python Scala

```
# NOTE: you must set $API_KEY below using information retrieved from your IBM Cloud account (https://au-syd.ml.cloud.ibm.com/docs/content/wsj/analyze-data/ml-inference-endpoints.html)
export API_KEY=<your API key>
curl -X POST -H "Content-Type: application/json" -H "Authorization: Bearer <token>" -d "{'text': 'I want to go to Paris next week'}" https://au-syd.ml.cloud.ibm.com/ml/v4/deployments/1c3e844b-dee1-4546-bb20-089c7043ccb3/si_service?version=2021-05-01
```

About this deployment

Name: Travel Agent

Description: Hi I'm your AI Travel Buddy – here to help you plan trips and create perfect itineraries.

Deployment Details

- Deployment ID: 1c3e844b-dee1-4546-bb20-089c7043ccb3
- 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

Last modified: 1 minute ago

28°C Mostly cloudy

Search

16:25 02-08-2025

Screenshot of the IBM WatsonX interface showing a deployment preview for the "Travel Agent" service.

The interface includes:

- Header: Projects - IBM Cloud, Travel Agent — Travel Planner, Travel Agent — Travel Agent, Settings | IBM WatsonX, Home | IBM WatsonX.
- Left sidebar: Deployment spaces / Travel Agent / Travel Agent.
- Top right: Upgrade, Mayuri Agrawal's Account, Sydney, MA.
- Panel: About this deployment (Name: Travel Agent, Description: Hi! I'm your AI Travel Buddy — here to help you plan trips and create perfect itineraries.).
- Preview tab: Shows a welcome message and a small graphic of travel icons.
- Input field: Type something... (with a send icon).
- Bottom status bar: 28°C Mostly cloudy, Search, various icons, ENG IN, 16:25, 02-08-2025.

Screenshot of the IBM WatsonX interface showing a deployment preview for the "Travel Agent" service, displaying an error message.

The interface includes:

- Header: Projects - IBM Cloud, Travel Agent — Travel Planner, Travel Agent — Travel Agent, Settings | IBM WatsonX, Home | IBM WatsonX.
- Left sidebar: Deployment spaces / Travel Agent / Travel Agent.
- Top right: Upgrade, Mayuri Agrawal's Account, Sydney, MA.
- Panel: Error message (Error loading deployments. Unexpected response code: 511, Timestamp 11:03:45 PM).
- Preview tab: Shows a welcome message and a small graphic of travel icons.
- Input field: Type something... (with a send icon).
- Bottom status bar: 23°C Mostly cloudy, Search, various icons, ENG IN, 23:07, 02-08-2025.