AgentBricks Workshop

Introduction

This document serves as a comprehensive **User Guide** for the **AgentBricks Workshop**. It is designed to walk participants through the entire setup process for the workshop environment, primarily leveraging a Databricks workspace provided through the Databricks Academy via **Vocareum**.

The guide covers essential prerequisites, including:

- Access to a Databricks workspace and setting up Git integration.
- Instructions for cloning and forking the main GitHub repository.
- Detailed steps for launching your workspace in Vocareum and creating the necessary repository.

Following the setup, the guide provides an outline for two main hands-on labs:

- Lab 1: Basic Knowledge Assistant
- Lab 2: Building Multi Agent Systems with Agent Bricks (including Knowledge Assistant)

Prerequisites

During the workshop, participants will have access to a Databricks workspace spin up through the Databricks Academy. The following prerequisites would only be needed if you would like to follow this guide in your own environment.

Access to Databricks workspace

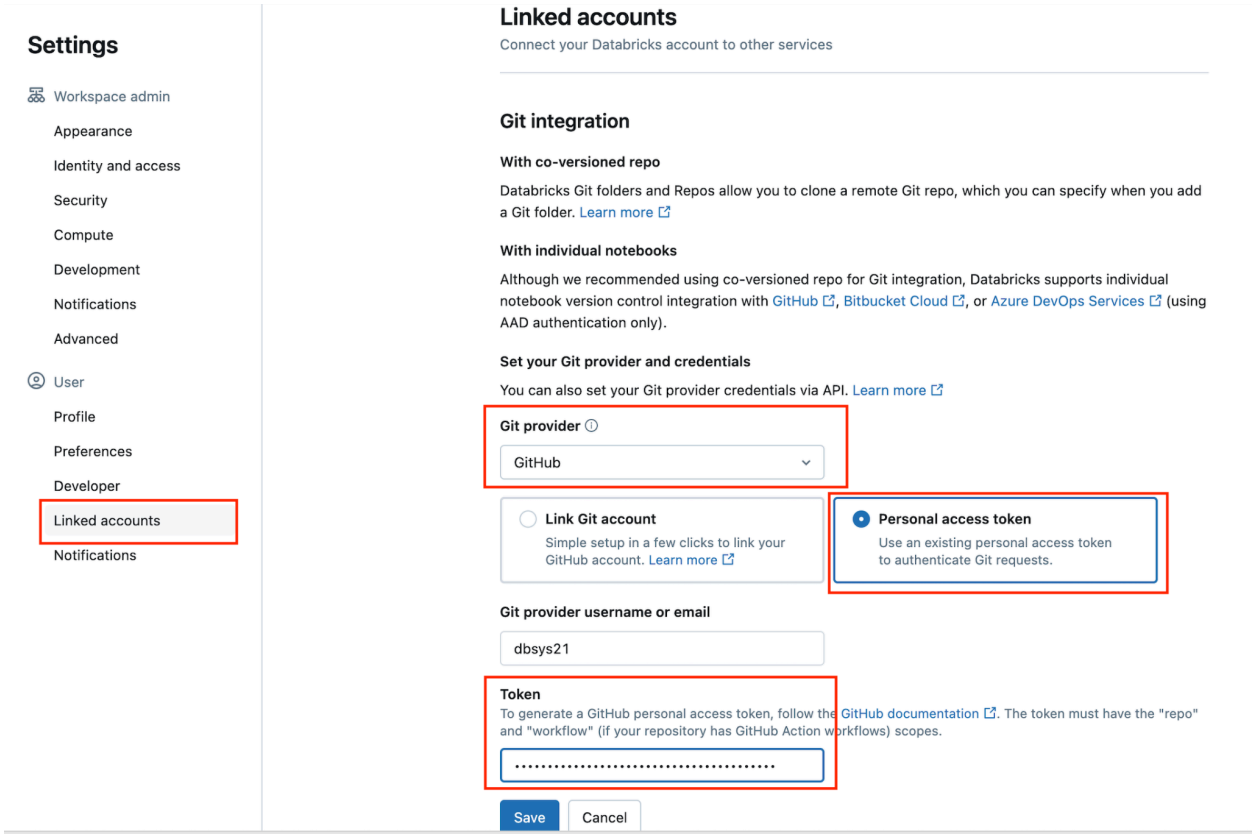
Please refer to below if you don't have a Databricks Workspace or here for Lighthouse access later in the year.

- Get started: Account and workspace setup | Databricks on AWS
- Get started: Account Get started with Databricks and workspace setup - Azure Databricks | Microsoft Learn
- Get started: Account and workspace setup | Databricks on Google Cloud

Setting up Git Integration in your workspace

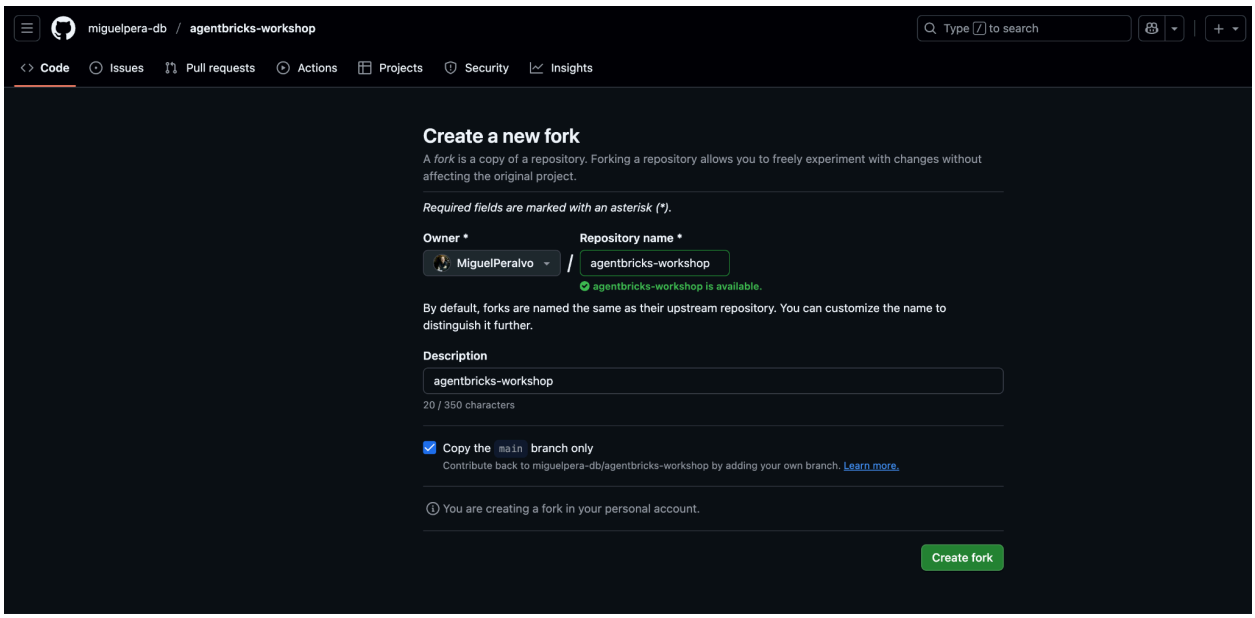
Here is how you set up a Github integration by clicking your profile at the top right corner in your Databricks Workspace , and then go to **Settings** -> **Linked accounts** -> **Git provider** -> Personal access token, input your Token and then click Save as below.

For more detail and on how to create a Github token, please refer to Configure Git credentials & connect a remote repo to Databricks



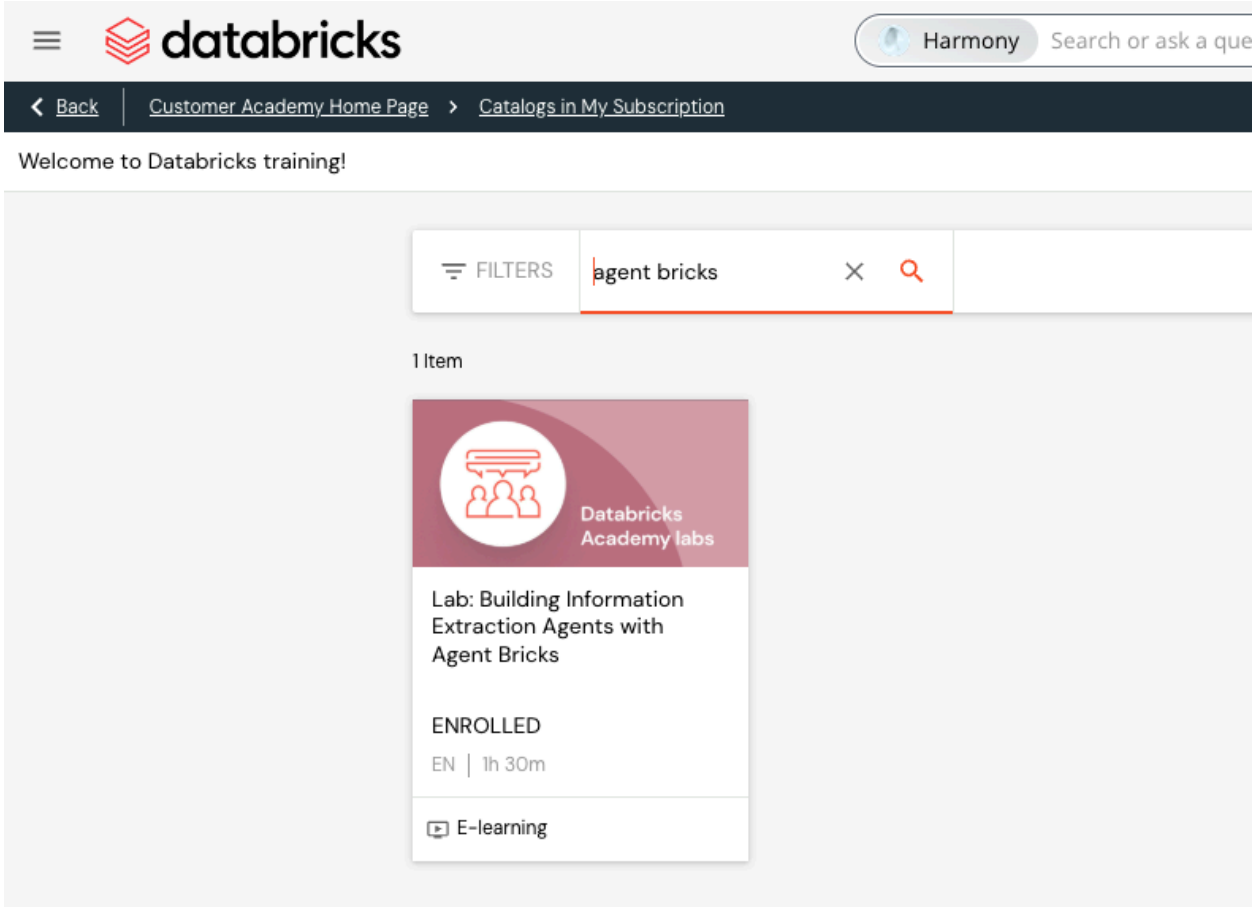
Clone & Fork Github repo (optional)

In your github repository, please fork the main repo, so that you could work with the forked repo when required. Here is how you could fork the repo in Github.



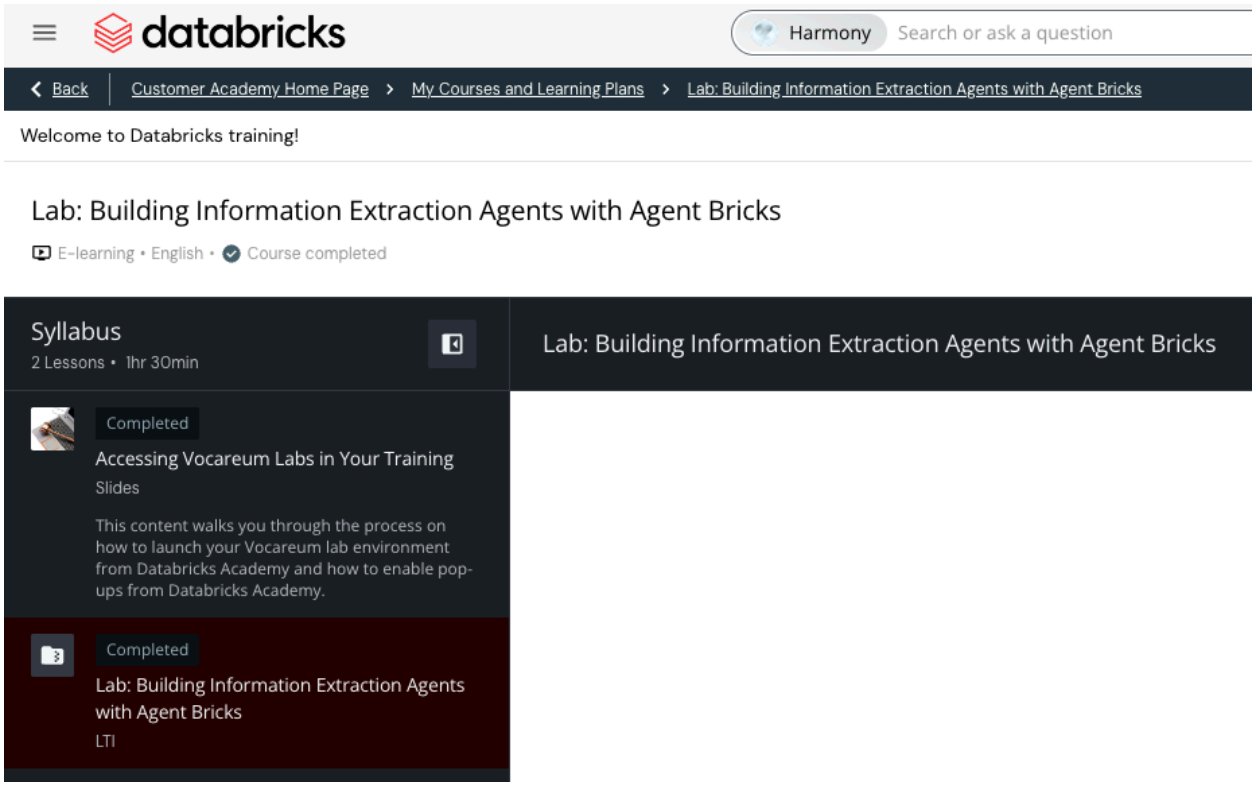
Launch your workspace in Vocareum

Browse the “Catalogs in my subscription” and look for the course “agent bricks” as below:



Or alternatively follow this link:
https://customer-academy.databricks.com/learn/courses/4599/lab-building-information-extraction-agents-with-agent-bricks/lessons

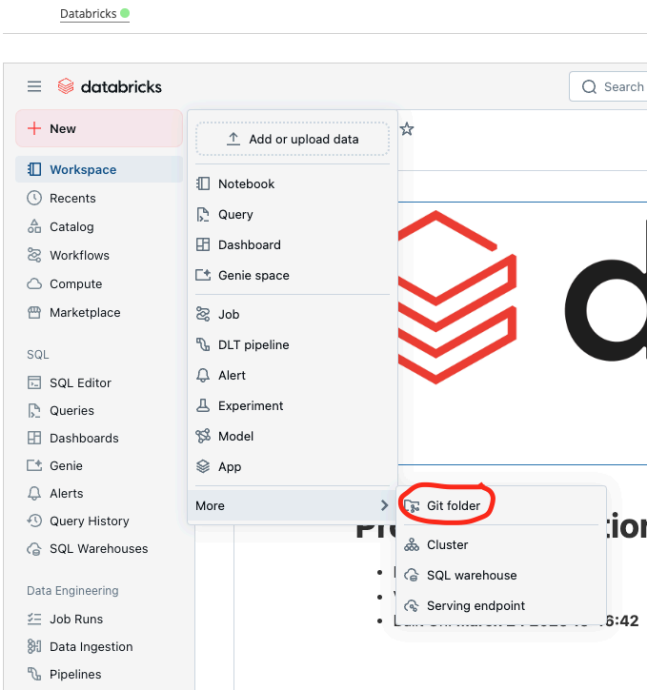
Then go to task “Lab: Building Information Extraction Agents with Agent Bricks” - you will get a new tab with your Vocareum workspace after a few minutes.



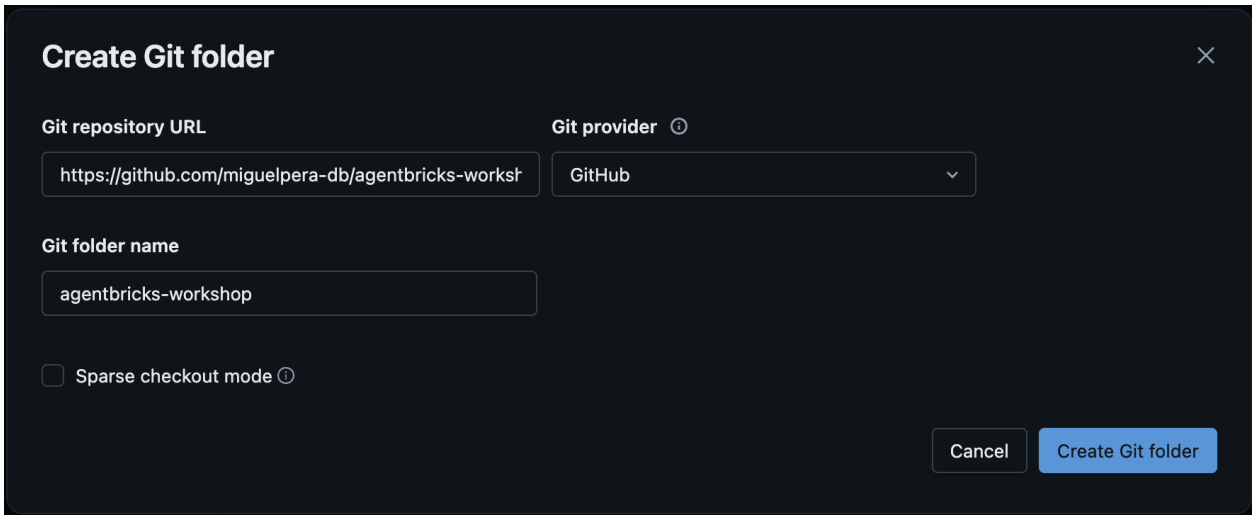
The workspace will last for 2 hours, but if you need it you can relaunch the workspace by clicking on “Retake the lesson”.

Create the Repo in your workspace

In your workspace, navigate to **+ New** -> **Git Folder** as below.

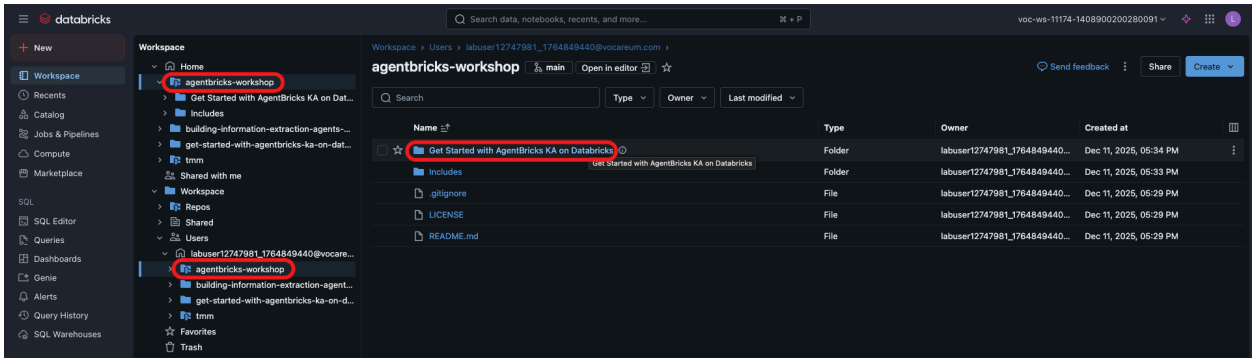


Once you click Git Folder, you will be directed to the screen below, simply input the **Git repository URL**: https://github.com/miguelpera-db/agentbricks-workshop, and click **Create Git Folder**.

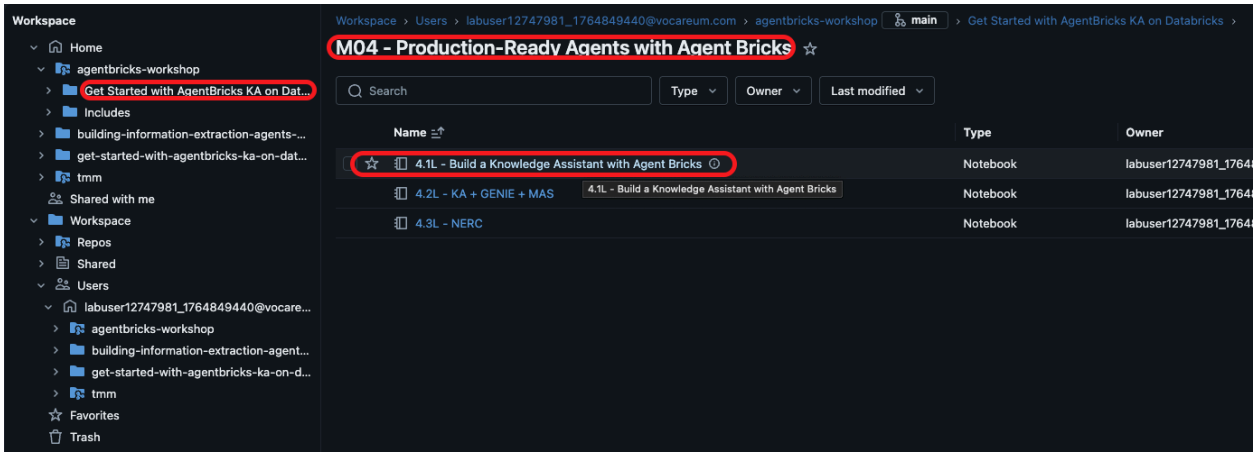


Start Lab 1 - Basic Knowledge Assistant

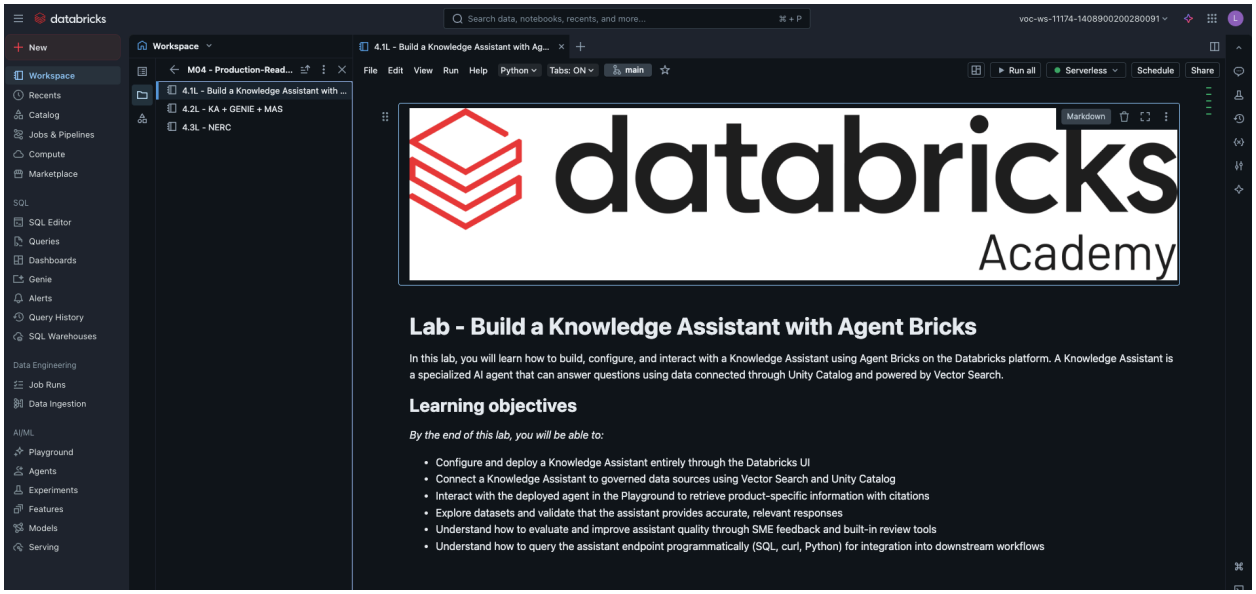
Once the repo is created, navigate to the repo **agentbricks-workshop** (both under your home or User in the Users section), directory **"Get Started with AgentBricks KA on Databricks".**



Now go to the subdirectory "M04 - Production-Ready Agents with Agent Bricks", and click on the notebook **4.1L - Build a Knowledge Assistant with Agent Bricks**.



You will be navigated to the the notebook contents below:



Lab Setup

In the notebook, run setup by executing the following two commands in your notebook cells.

```
%run "../../Includes/Workspace-Setup"
```

```
%run "../../Includes/Classroom-Setup-4.1L"
```

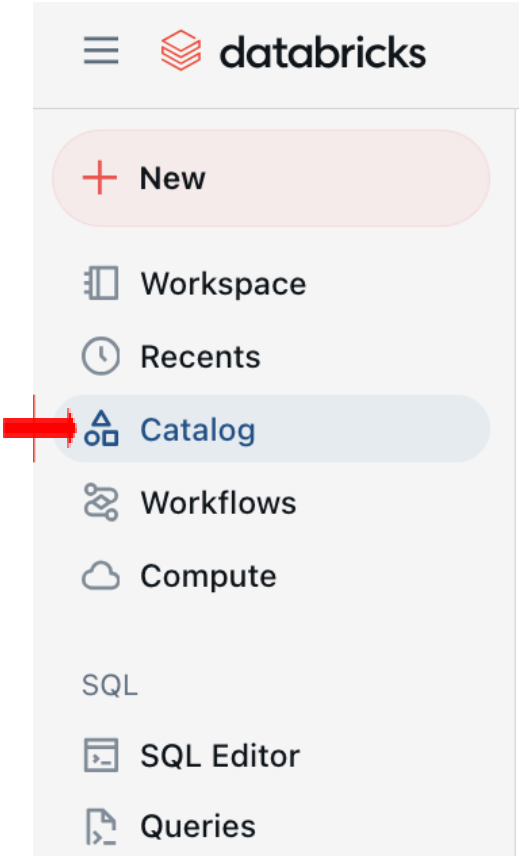
Explore the data

The Catalog Explorer (Catalog) provides a space to explore and manage data, schemas (databases), tables, permissions, and models.

The data explorer is the main UI for the Unity Catalog object model. Here, you can view schema details, preview sample data, see table details and properties, and explore lineage.

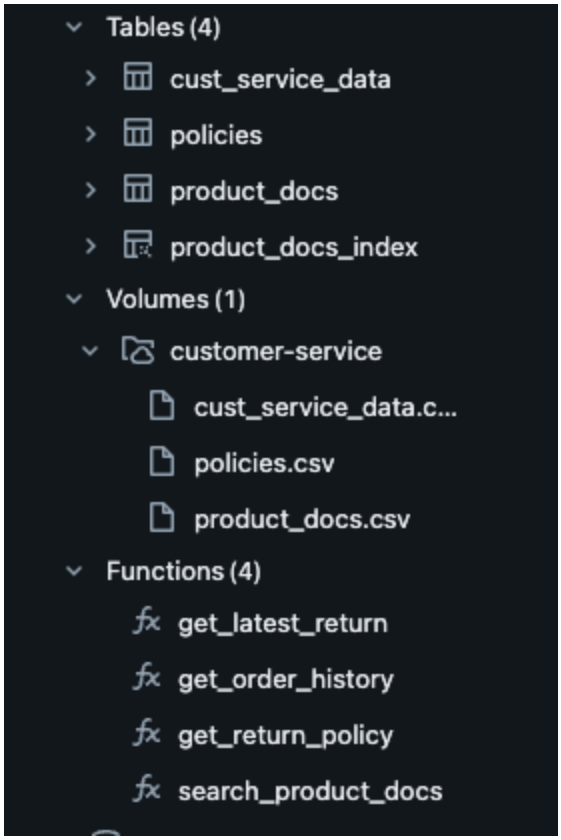
Admins can change owners and grant and revoke permissions.

STEP 1: Navigate to the Catalog Explorer



STEP 2: Explore the data assets

In the Catalog page, you will be able to see the catalogs you have access to. In your vocareum environment, you can only write into schema **labuser{nnn}_{nnn} under catalog** catalog **dbacademy**. Once the setup script is complete, you should see, at a minimum, the following data assets under your schema:



In the sections A3 and A4 you get more information about the different data assets.

Follow the instructions in the notebook
Start with section A:

A. Create the Knowledge Assistant

Please follow along, but this part of the lab will be performed by you so you can query the Agent Brick deployed within this Workspace.

1. In the left nav, go to **AI / ML → Agents → Agent Bricks → Knowledge Assistant**. (Or search "Knowledge Assistant" in the workspace search.)
2. On **Configure**, fill in:
   - **Name**: my-product-agent
   - **Description**: An agent used to answer questions regarding customer product information.
3. **Add knowledge source** (the core of your RAG):
   - **Type**: *Vector Search Index*
   - **Source**: product_docs_index
   - **Doc URI Column**: product_id
   - **Text Column**: indexed_doc
   - **Describe the content**: Product documentation
4. (Optional) **Instructions**: Style/guardrails for answers (tone, citation behavior, etc.).
5. Legacy (skipped)

A1. WAITING FOR THE KNOWLEDGE ASSISTANT

6. The right-side panel will show build/sync progress and, once ready, links to the **deployed endpoint**, **experiment**, and **synced sources**. (Initial build/sync can take a while.)

> Please allow for 5-10 minutes for the agent to be deployed.

A2. Using the Knowledge Assistant

7. Navigate to the Playground using the left menu.
8. Using the model name dropdown menu at the top, select your model. You can search for `my-product-agent`.
9. Start querying! Here are some sample questions you can ask
   - "Can you tell me about the BlendMaster Elite 4000?"

Note the citations presented as a part of the output. This brings in the power of Agent Bricks; your agent is connected to your data and completely governed by Unity Catalog. It's in this way that your agent lives alongside your data.

A3. Explore the Dataset and Test your Brick

You can reference different product names by running the cell below.

```
▶                                                                    10

  %sql
  select product_name from product_docs where product_name is not null
```

Continue with the B, C and D sections if you have enough time.

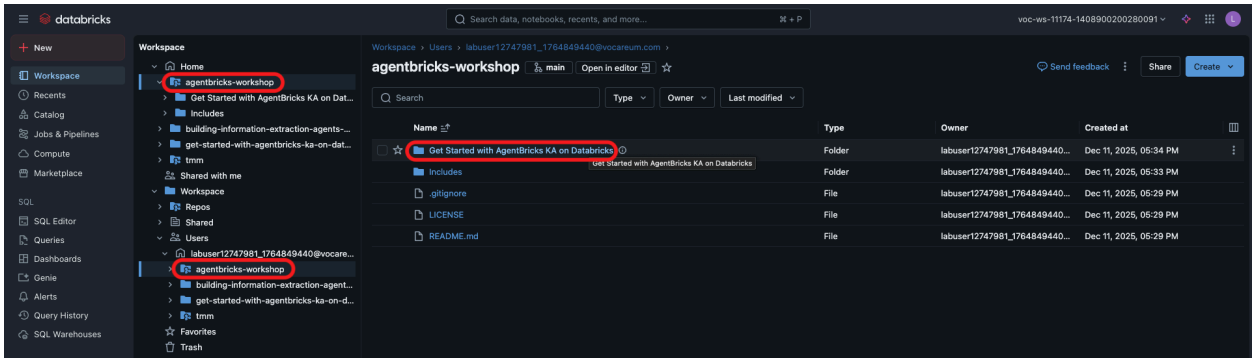
And finally remember to clean up:

Clean Up

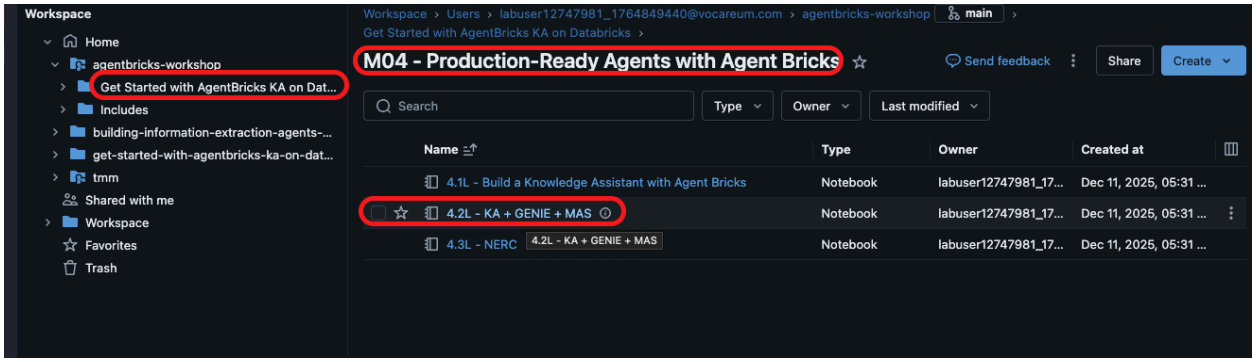
If you *did* create an agent using the instructions above, please navigate to your agent using the **Agents** menu on the left side of the workspace, select the three vertical dots, and select **delete**. This helps preserve resources for other users in this lab environment.

Start Lab 2: Building Multi Agent Systems with Agent Bricks (including Knowledge Assistant)

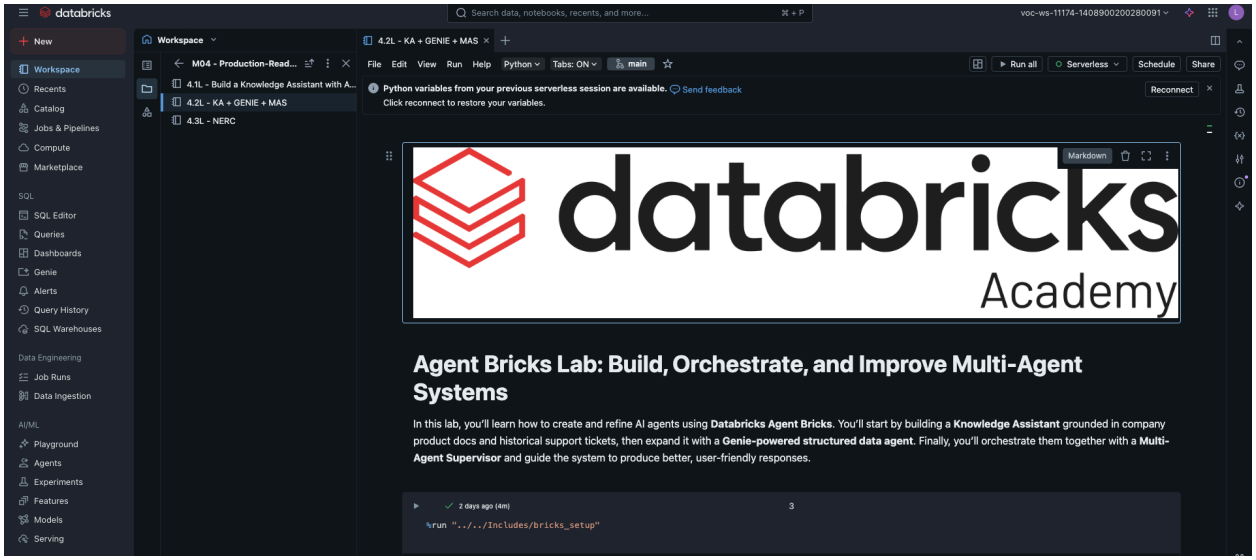
Navigate again to the repo **agentbricks-workshop** (both under your home or User in the Users section), directory **"Get Started with AgentBricks KA on Databricks".**



Now go to the subdirectory "M04 - Production-Ready Agents with Agent Bricks", and click on the notebook **4.2L - KA + GENIE + MAS**



You will be navigated to the the notebook contents below:



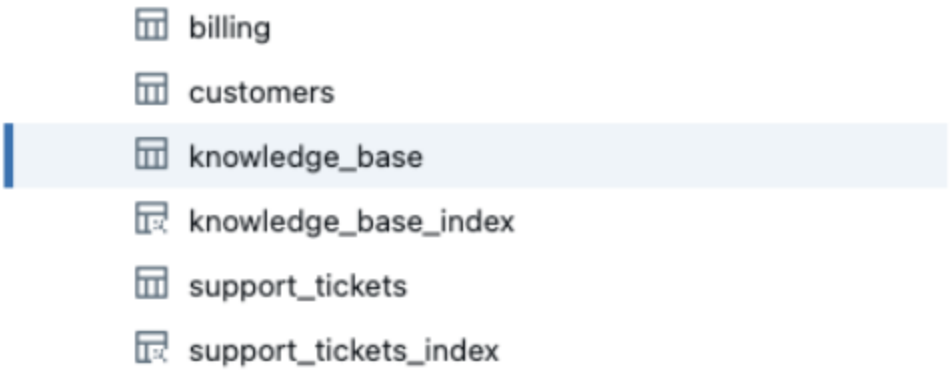
Lab Setup

In the notebook, run setup by executing the following two commands in your notebook cells.

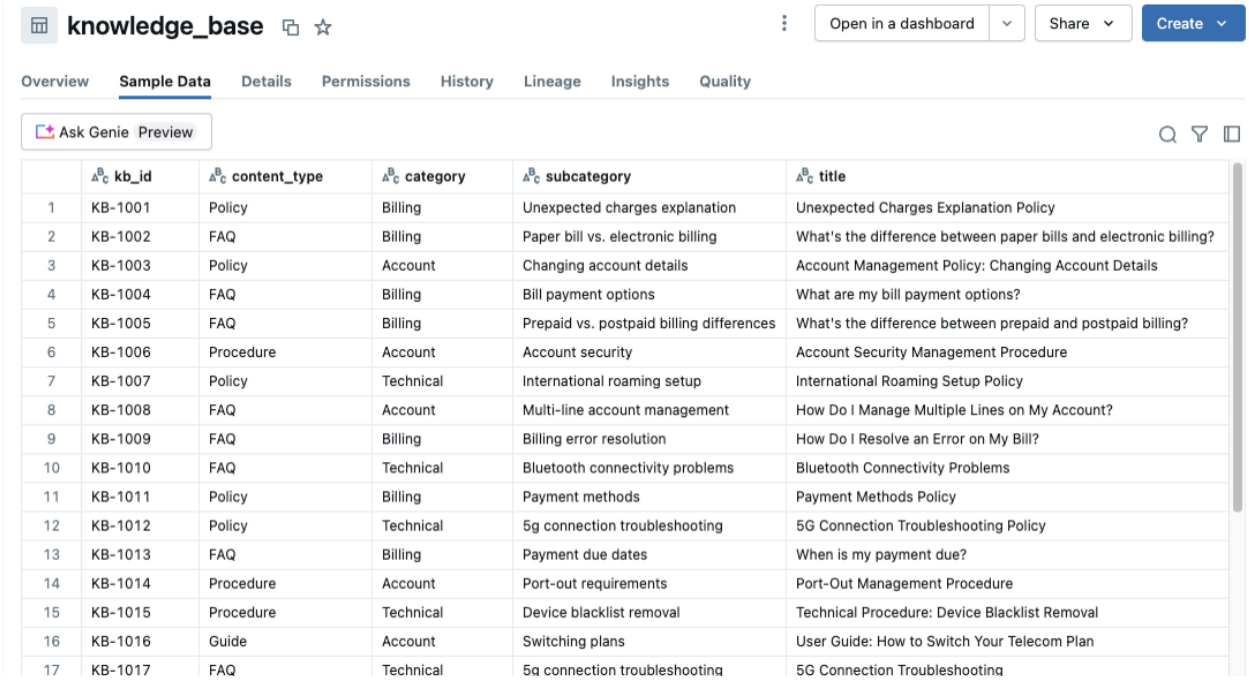
```
%run "../../Includes/bricks_setup"
```

Explore the data

Once the setup script is complete, you should see, at a minimum, the following data assets under your schema:

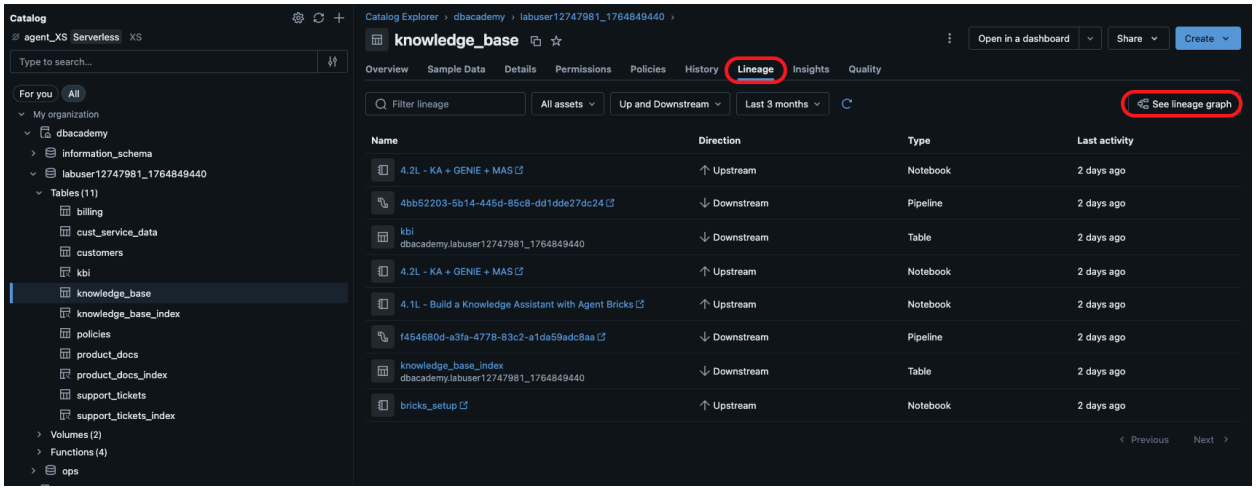


If you take a look at the knowledge_base table, for example, you should see the following:

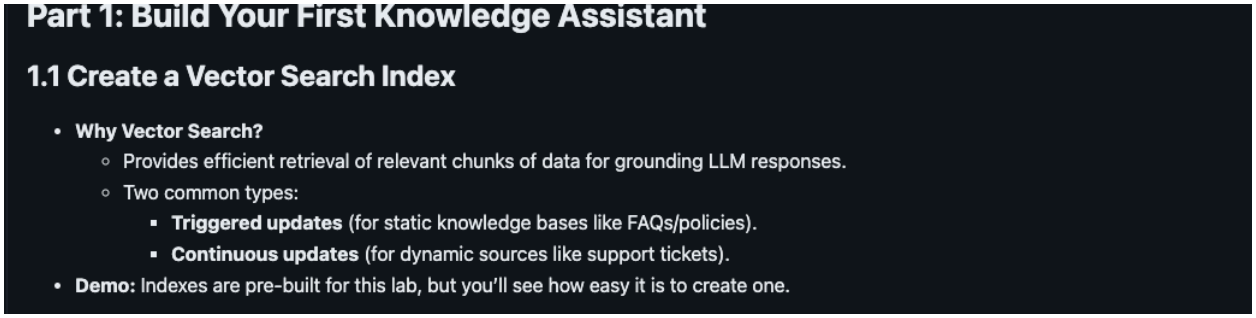


	kb_id	content_type	category	subcategory	title
1	KB-1001	Policy	Billing	Unexpected charges explanation	Unexpected Charges Explanation Policy
2	KB-1002	FAQ	Billing	Paper bill vs. electronic billing	What's the difference between paper bills and electronic billing?
3	KB-1003	Policy	Account	Changing account details	Account Management Policy: Changing Account Details
4	KB-1004	FAQ	Billing	Bill payment options	What are my bill payment options?
5	KB-1005	FAQ	Billing	Prepaid vs. postpaid billing differences	What's the difference between prepaid and postpaid billing?
6	KB-1006	Procedure	Account	Account security	Account Security Management Procedure
7	KB-1007	Policy	Technical	International roaming setup	International Roaming Setup Policy
8	KB-1008	FAQ	Account	Multi-line account management	How Do I Manage Multiple Lines on My Account?
9	KB-1009	FAQ	Billing	Billing error resolution	How Do I Resolve an Error on My Bill?
10	KB-1010	FAQ	Technical	Bluetooth connectivity problems	Bluetooth Connectivity Problems
11	KB-1011	Policy	Billing	Payment methods	Payment Methods Policy
12	KB-1012	Policy	Technical	5g connection troubleshooting	5G Connection Troubleshooting Policy
13	KB-1013	FAQ	Billing	Payment due dates	When is my payment due?
14	KB-1014	Procedure	Account	Port-out requirements	Port-Out Management Procedure
15	KB-1015	Procedure	Technical	Device blacklist removal	Technical Procedure: Device Blacklist Removal
16	KB-1016	Guide	Account	Switching plans	User Guide: How to Switch Your Telecom Plan
17	KB-1017	FAQ	Technical	5g connection troubleshooting	5G Connection Troubleshooting

You should also be able to see any vector search index that has been created on top of that table in the table lineage:

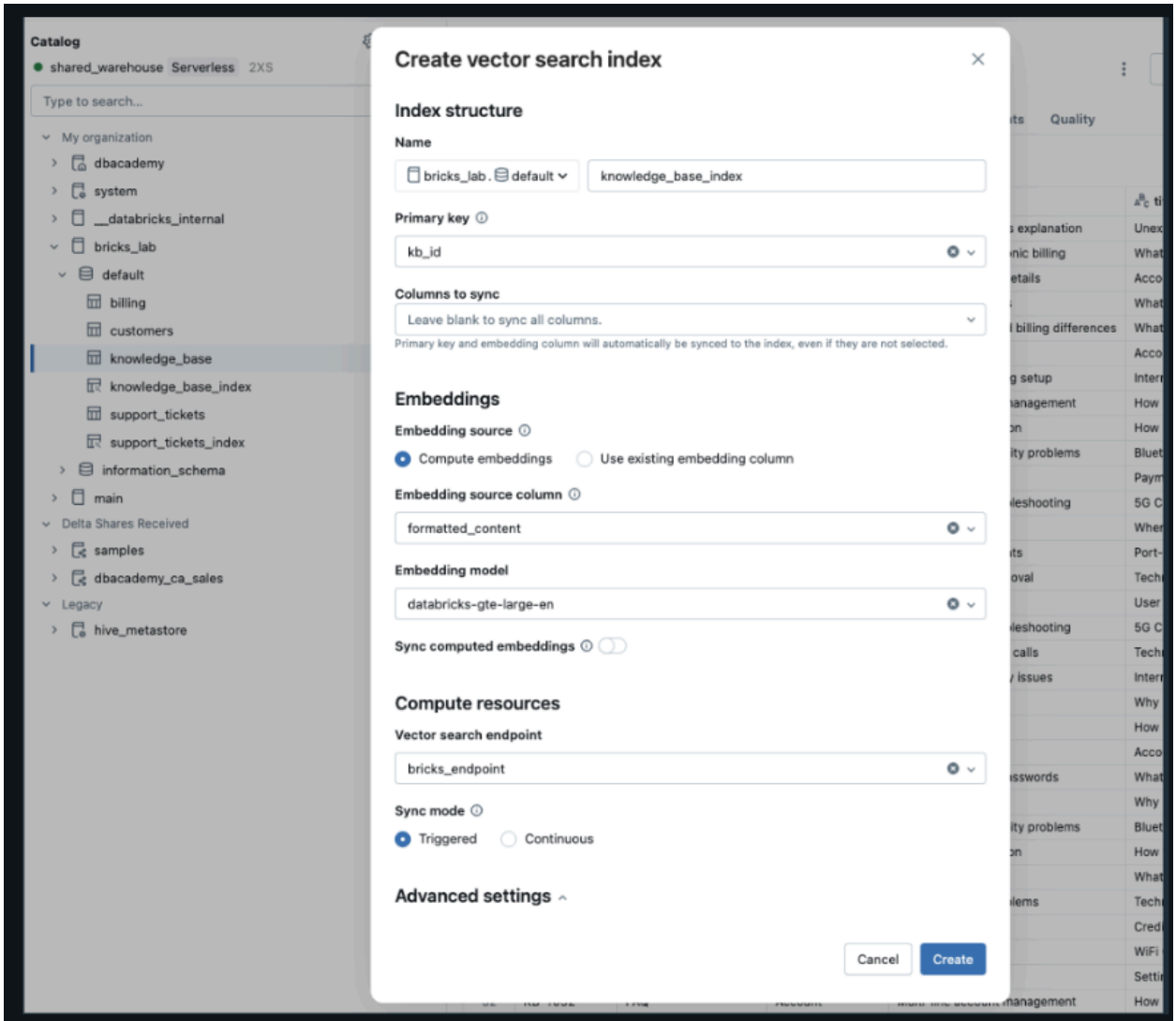


Follow the instructions in the notebook



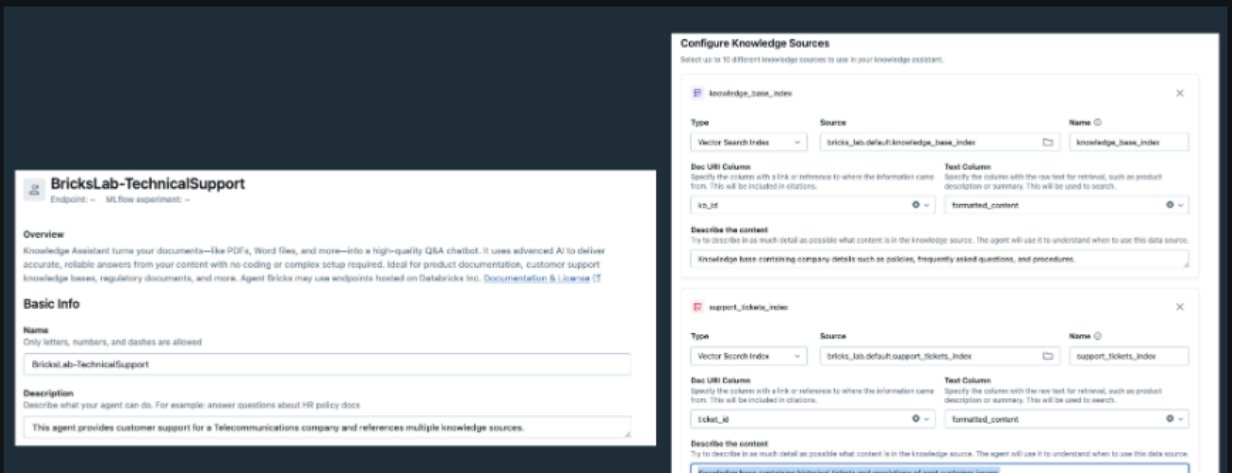
For the Knowledge Assistant sections, you may want to use this text:

- **Overview:** Knowledge Assistant turns your documents - like PDFs, word files, and more-into a high-quality Q&A chatbot. It uses advanced AI to deliver accurate, reliable answers from your content with no coding or complex setup required. Ideal for product documentation, customer support knowledge bases, regulatory documents, and more. Agent Bricks may use endpoints hosted on Databricks Inc.
- **Basic Info:**
    - **Name:** BricksLab-TechnicalSupport
    - **Description:** This agent provides customer support for a Telecommunications company and references multiple knowledge sources.



1.2 Build the Knowledge Assistant Agent

- **Navigate to "Agents"** in the UI.
- **Create a new Knowledge Assistant** using the two pre-built vector search indices:
  - **Knowledge Base** – Company details, FAQs, policies, and procedures.
  - **Support Tickets** – Historical tickets and their resolutions.
- **Example setup:**
  - **Name:** `[your_initials]-BricksLab-TechnicalSupport`
  - **Description:** Provides telco product support using company docs and historical tickets.



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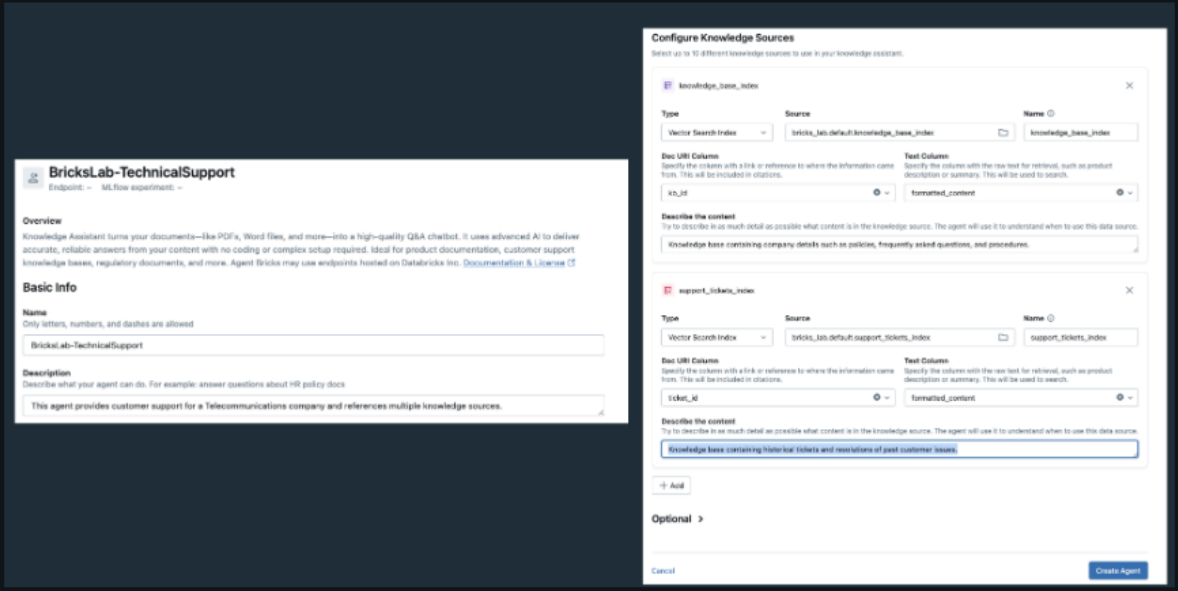
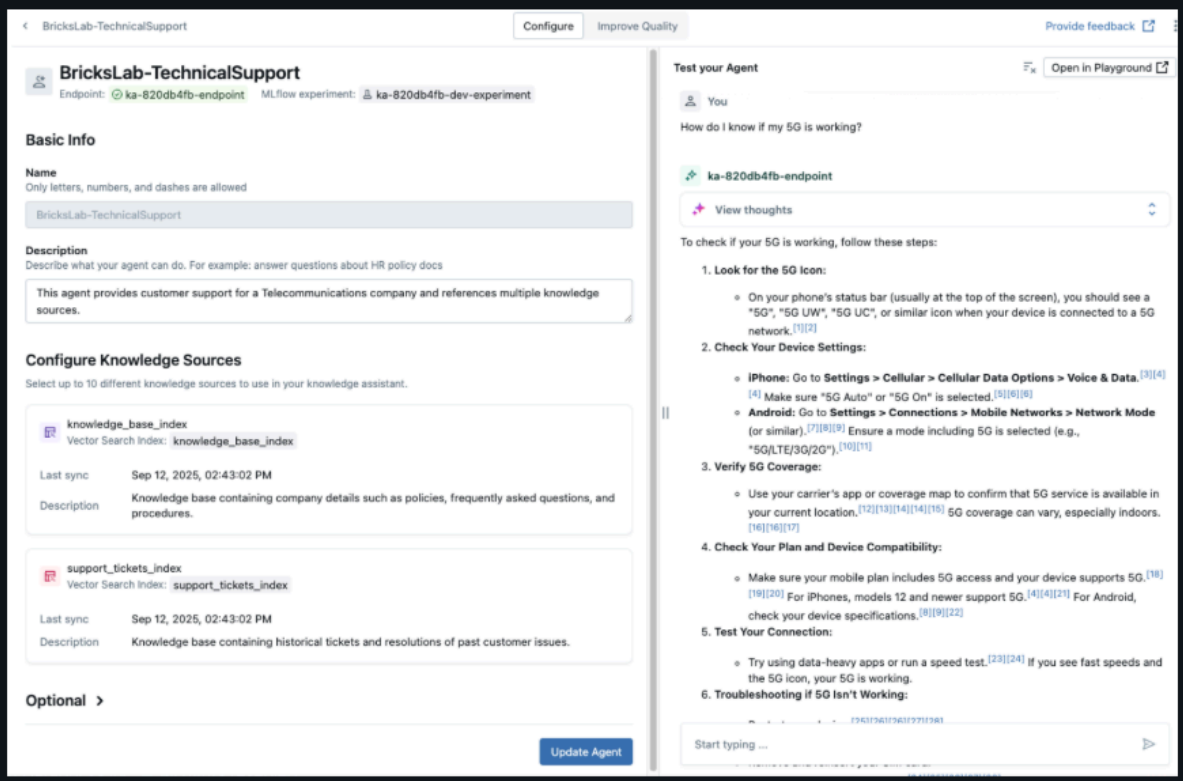
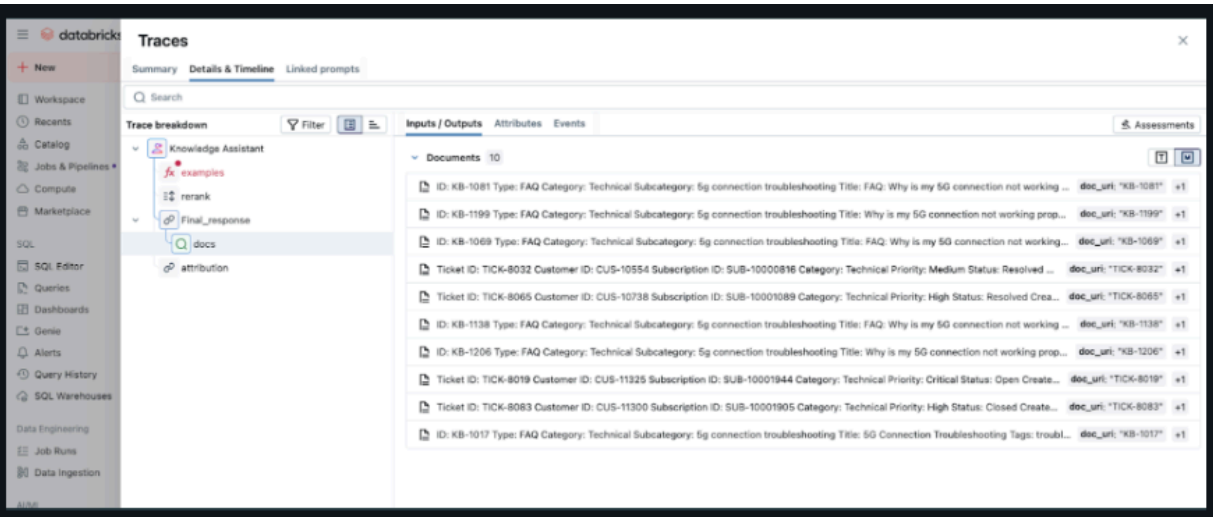


1.3 Test the Knowledge Assistant

- **Sample Question:** *How do I know if my 5G is working?*
- Observe the verbose answer with citations and traces.
- Explore how the assistant grounds responses in living company data.

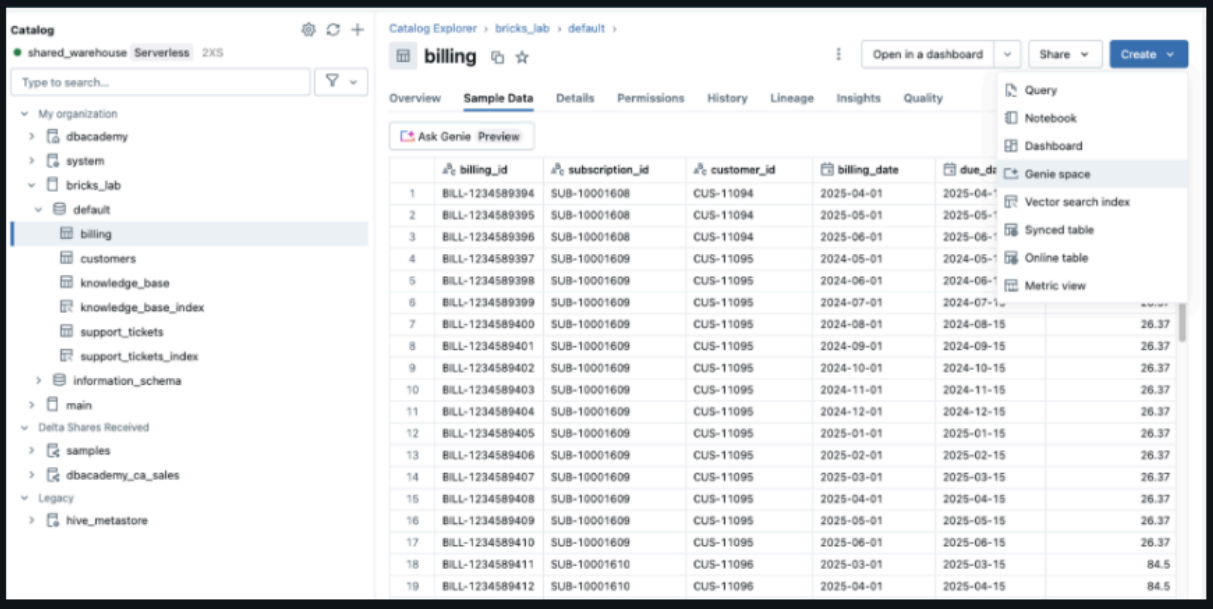


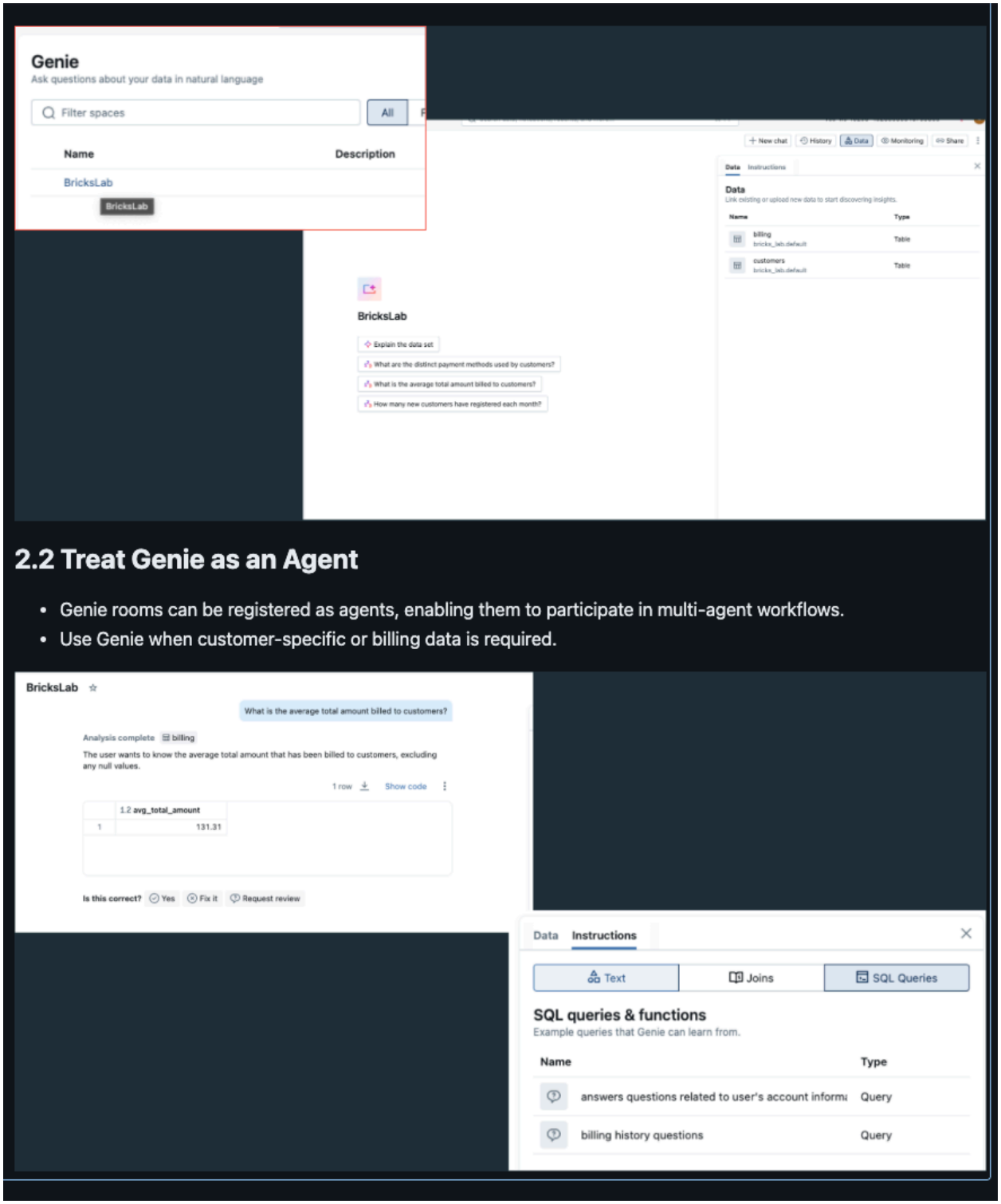


Part 2: Expand with Genie for Structured Data

2.1 Query Structured Data with Genie

- **Genie spaces** allow natural language queries over structured data (SQL tables).
- Genie is pre-configured to access **billing and customer tables**.
- **Try It Out:**
  - Ask *"What is the average total bill?"*
  - Guide Genie with examples/instructions to better align with your data structures.





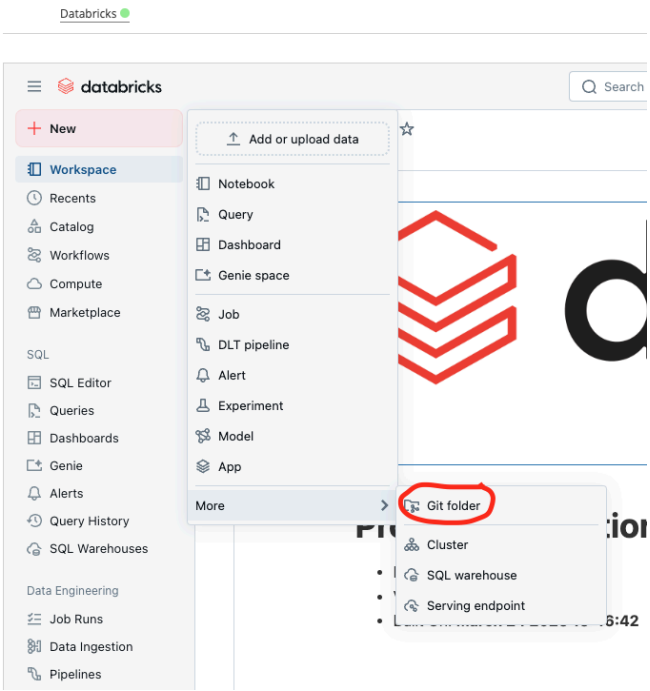
Continue with the rest of the sections, following the instructions.

Backup environment and lab (if Vocareum doesn't work): Databricks Free Edition

Create an Databricks Free Edition account with your corporate account (or personal email if your corporate account gets blocked): https://www.databricks.com/learn/free-edition

Create the Repo in your workspace

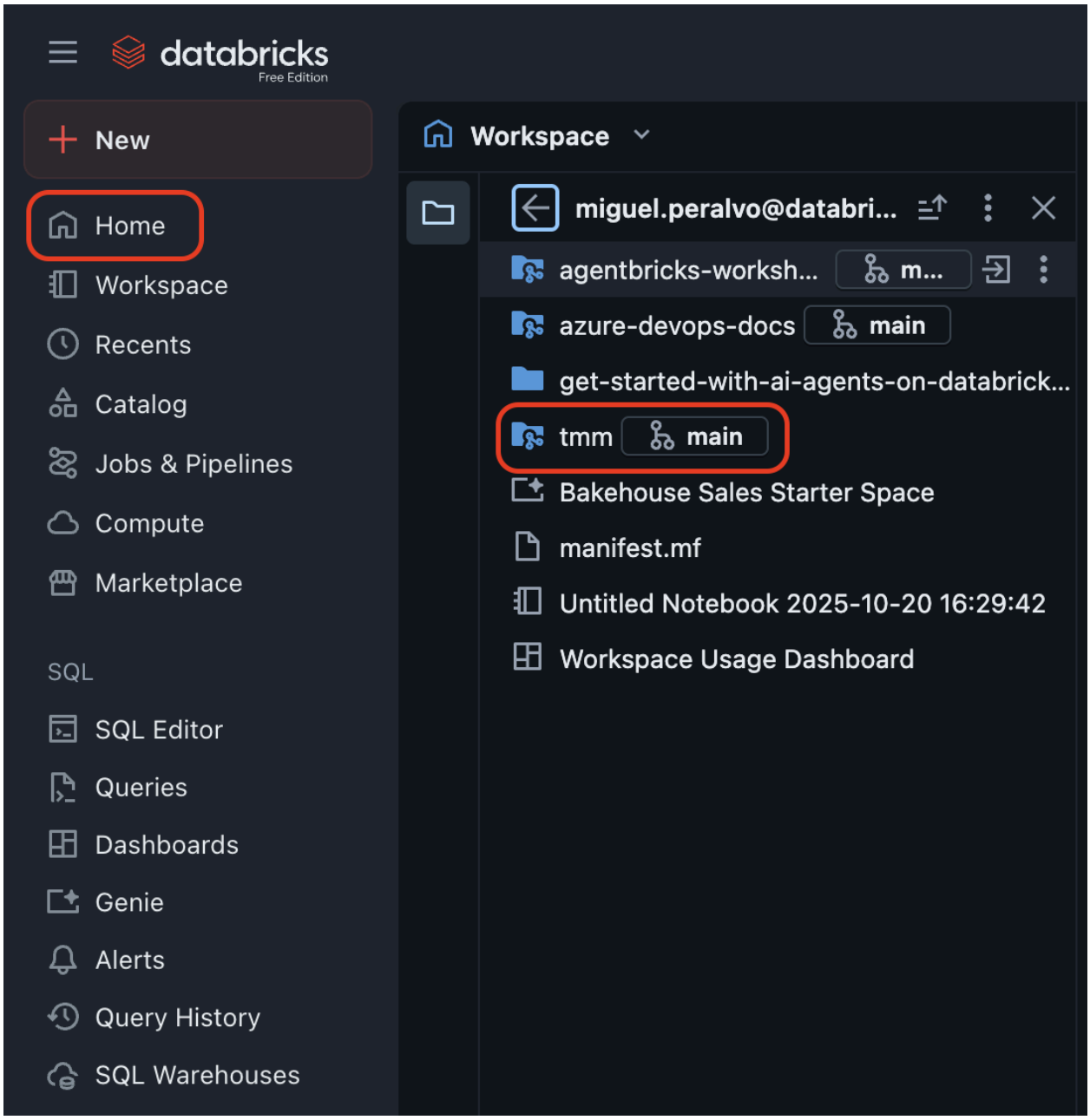
In your workspace, navigate to **+ New** -> **Git Folder** as below.



Once you click Git Folder, you will be directed to the screen below, simply input the **Git repository URL** https://github.com/databricks/tmm, and click **Create Git Folder.**

Start the Lab

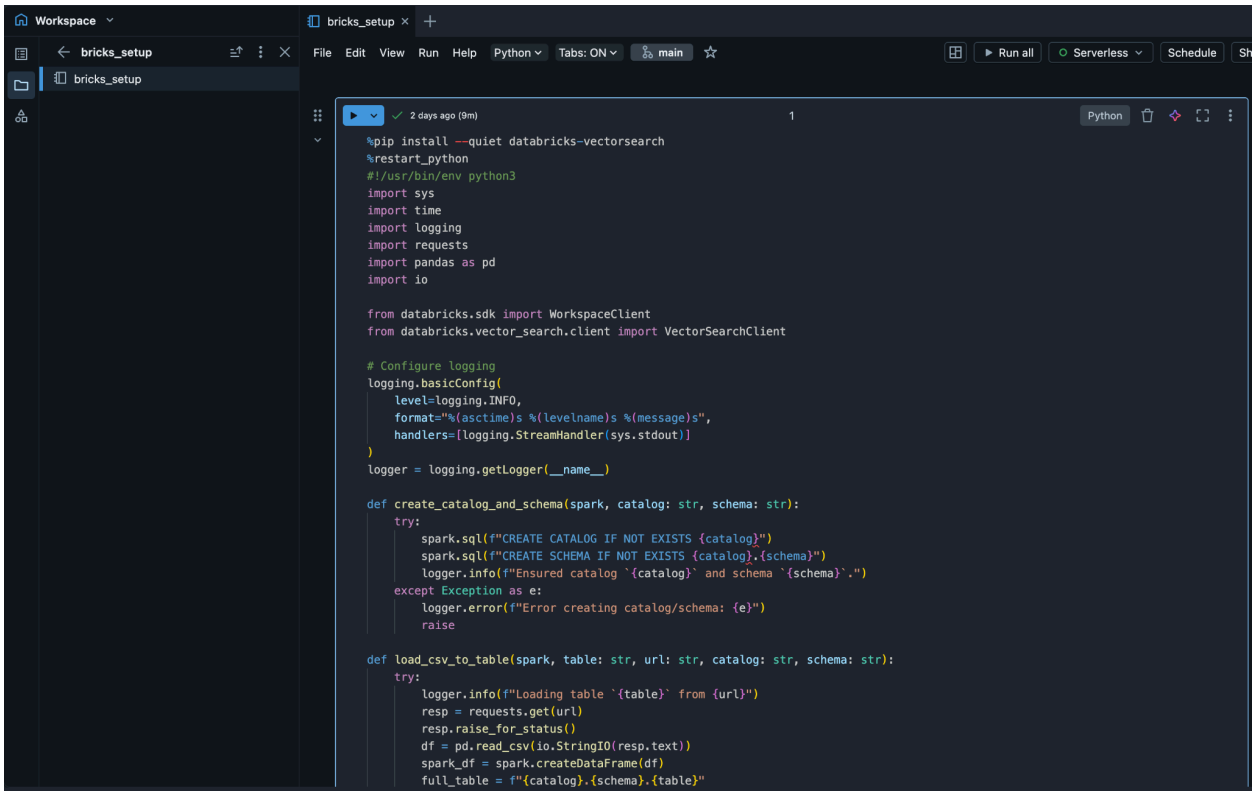
Once the repo is created, navigate to the repo **tmm**:



Agents Workshop
Navigate to **agents-workshop/README.md** and follow the instructions

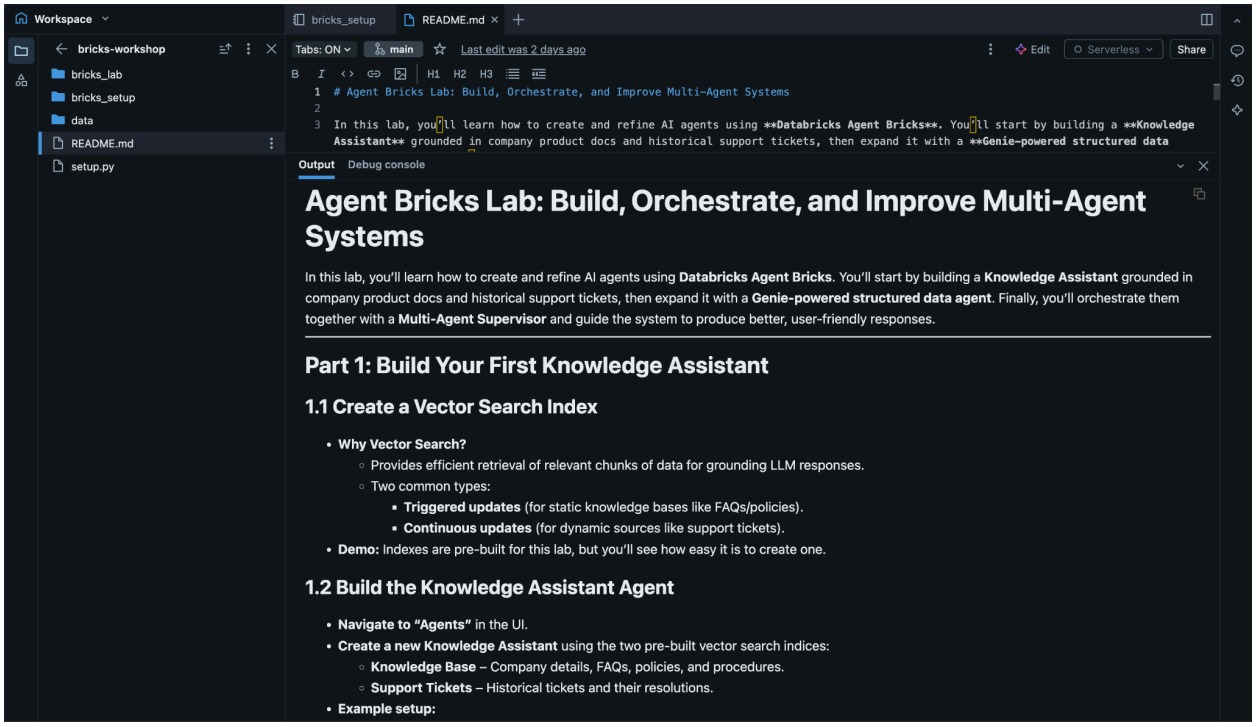
Agent Bricks Workshop (Once Agents are available in free edition, in 2026, in the meantime you can use other workshops under tmm, like Agents Workshop above)

Navigate to **bricks-workshop/bricks_setup/bricks_setup**:



Now run it.

And go back to **bricks-workshop/README.md**, following the instructions:



This notebook with pictures can help you out:

https://github.com/miguelpera-db/agentbricks-workshop/blob/main/Get%20Started%20with%20AgentBricks%20KA%20on%20Databricks/M04%20-%20Production-Ready%20Agents%20with%20Agent%20Bricks/4.2L%20-%20KA%20%2B%20GENIE%20%2B%20MAS.ipynb

Part 1: Build Your First Knowledge Assistant

1.1 Create a Vector Search Index

- **Why Vector Search?**
  - Provides efficient retrieval of relevant chunks of data for grounding LLM responses.
  - Two common types:
    - **Triggered updates** (for static knowledge bases like FAQs/policies).
    - **Continuous updates** (for dynamic sources like support tickets).
- **Demo:** Indexes are pre-built for this lab, but you'll see how easy it is to create one.