AGENTIC AI FOR ARCHITECTS WORKSHOP
Hands-On Challenge 1 User Guide

(Version: August 2025)

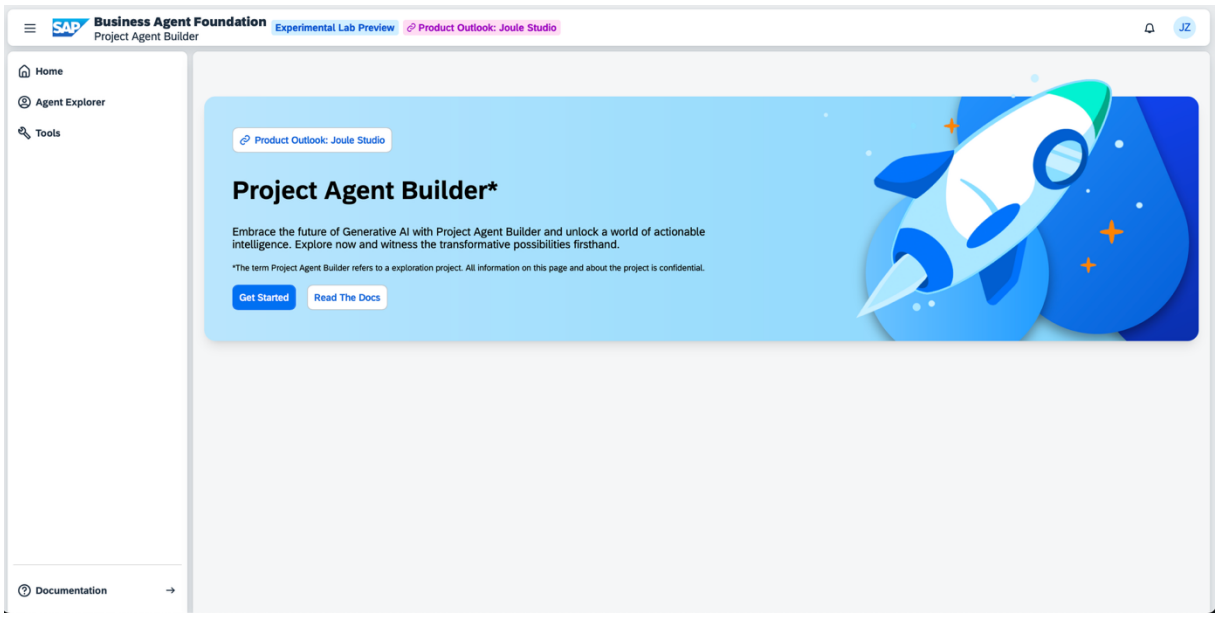
1. Setup

1.1 Download the *quotation.pdf* and *openapi-spec.json* files from GitHub: https://github.com/johann-sov/agents-workshop/tree/main/Challenge_1_Quotation_Agent

1.2 Navigate to the SAP Project Agent Builder: https://sovanta-icd9n2rh.baf-prod.cfapps.us10.hana.ondemand.com/ui/index.html#/

1.3 Log in with your provided username and password

1.4 After logging in, you should see this screen:



2. Create Your Agent

2.1 Navigate to the *Agent Explorer* section and click *Create Agent*

2.2 Configure your agent with the following information:

- **Name:** Enter a unique name for your agent, for example including your name. Please note that this name and your agent will be visible for other participants of the workshop.

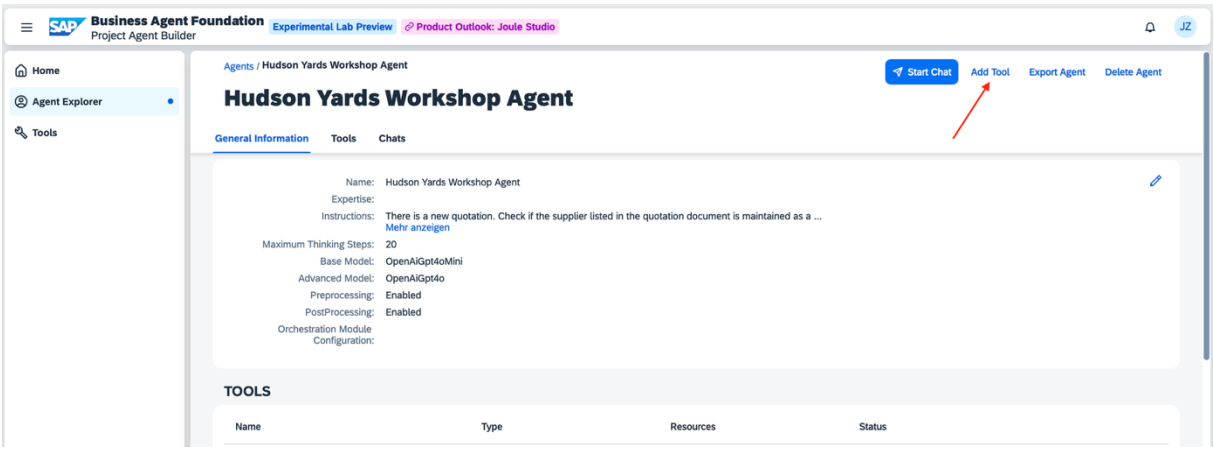
- **Initial Instructions**: These instructions serve as the foundation for the behavior of your agent. You can use this template as a starting point:

> *There is a new quotation. Check if the supplier listed in the quotation document is maintained as a business partner in our API. Check if there are any blocks existing for the supplier. Then check if all positions in the quotation are correctly calculated. Calculate the subtotal and the total and check whether the values match what is given in the document. Figure out which of the SAP locations is closest to the supplier by searching the web, such that I know where to deliver the items to. Based on your analysis create a report if the quotation should be approved or rejected.*

- You can leave all other fields in their default settings. Later, you can play around with these settings to improve your agent's behavior.

3. Add Tools to your Agent

3.1 Navigate to your agent's detail page and click the Add Tools button to add tools. Tools allow your agent to perform tasks and access external systems. You can find an overview of available tools in the Tools tab.



3.2 Add the following tools to your agent:

Calculator (allows your agent to perform mathematical calculations)

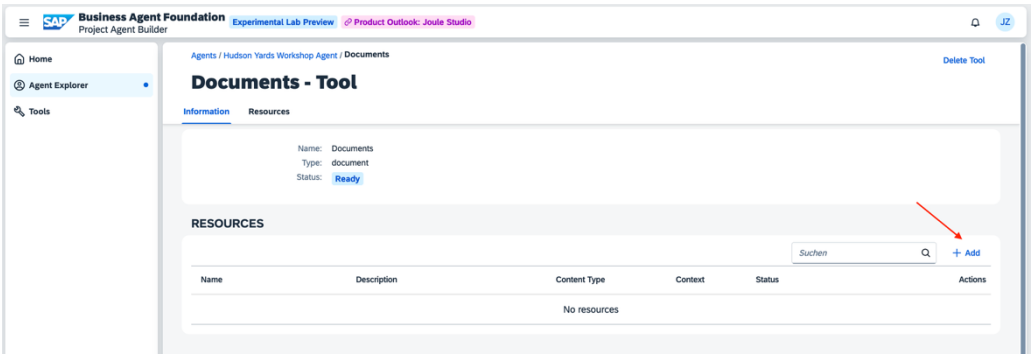
- Select the Calculator tool type from the drop-down
- Assign a name of your preference, such as Calculator
- Complete the process by clicking the Create button

Web Search (allows your agent to search the internet)

- Select the WebSearch tool type from the drop-down
- Set the domain constraint to www.sap.com to restrict searches to official SAP content
- Assign a name of your preference, such as SAP Search
- Complete the process by clicking the Create button

Document (allows your agent to access uploaded documents)

- Select the Document tool type from the drop-down
- Assign a name of your preference, such as Documents
- Complete the process by clicking the Create button
- From the tools section of your agent, select the newly created Document tool
- In the Resources section, click the Add button



- Choose upload mode File and upload the quotation.pdf file
- Provide a descriptive name and description for the file, such as Quotation. This information will help the agent correctly identify the document
- Complete the process by clicking the Save button

OpenAPI (allows your agent to access external APIs)

- Select the OpenAPI tool type from the drop-down
- Assign a name of your preference, such as Business Partner API
- Specify the destination: Business_Partner
- Ensure only GET requests are permitted
- Insert the OpenAPI specification from the openapi-spec.json file
- Complete the process by clicking the Save button

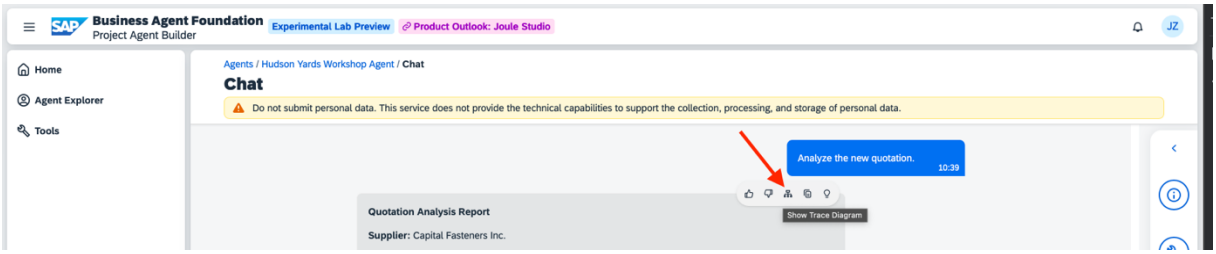
4. Use your Agent

4.1 Navigate to your agent's detail page and click the Start Chat button to create a new chat with your agent. You may create as many chats as you like.

4.2 Send your first message to the agent. You can use this simple prompt: Analyze the new quotation.

4.3 The agent will acknowledge your request and begin processing. This may take up to one or two minutes. In case of any error messages, it is often enough to reload the page. Once finished, the agent will provide you with a report on the quotation document.

4.4 After the final agent response is displayed, you can investigate the detailed steps undertaken by the agent by hovering over the answer and clicking on the *Show Trace Diagram* button. You can use this view to find out what exactly the agent did and check what went wrong in case of errors.



4.5 In case your agent did not achieve the desired outcome, you can start with investigating the trace and then adapting the instruction, the tool descriptions and your prompt.

5. Additional Challenges

5.1 To further explore your agent's capabilities, try sending additional messages. For example:

- Ask about different business partners
- Inquire about alternative SAP locations
- Request specific details from the quotation

5.2 You can try removing the instruction or replacing it with a reduced variant and check if the agent is still able to complete the task on its own.

5.3 Besides the GPT Family of Large Language Models (LLMs) from OpenAI that are used by the agents in the default setting, the Project Agent Builder also supports Google Gemini and the Mistral open source models. You can create a new agent with the same functionality that uses a different LLM and check if the behavior is the same or if it performs better or worse.

5.4 After successfully creating the agent from this example, you may start to create the agent you came up with during use case ideation! Here are some tips to mitigate challenges that may arise:

- Your agent will not be able to read any data from internal systems. However, you can replace this system access by uploading CSV files or other documents containing the data that you want to work with
- Similarly, the agent will not be able to make requests to internal systems. Instead, you can simply tell your agent to output what request it would do if it was possible.
- Experiment with the agent's instruction as it is a key determinant to the agent's behavior.