Microsoft Power Virtual Agent in a Day Preview

Lab 01: Planning your first chatbot

Hands-on Lab Step-by-Step

Contents

Power Virtual Agents

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Goals for this lab

After this lab you will be able to:	
- Understand common goals for bot projects and how to think about the fundamentals of business value when implementing bots - Understand the core components to think about first when building bots, including topics, sub topics and customer phrases - Plan additional detail to expand upon topic information such as if topics are single or multi turn, or require specific data to be able to serve the customers need	The time to complete this lab is [40] minutes.

Scenario: Planning your chatbot

You have got access to your Power Virtual Agent environment, and you are ready to get started! Before you can get hands on with the product, we recommend you complete this very short module to plan your chatbot using the recommended paths outlined in our **Bot Building Handbook**. This will set you up for success to be able to plan your topics, customer phrases and intention for building a bot that adds value to your organization. The Bot Building Handbook is included in the Power Virtual Agent in a Day Preview materials.

Scenario: Contoso Coffee customer support

You can use the following scenario throughout the labs to build your bot around. You can also use your own scenarios if you so wish.

Welcome to Contoso Coffee! At Contoso Coffee, we are passionate about providing efficient, environmentally sustainable, and innovative coffee products, barista experiences, and services. With you as our newest Customer Support team member, we have no doubt that together we will reach higher levels of success and innovation!

Consumer sentiment is at an all-time high, but with increasing competition, it is more important than ever to minimize costs and focus on customer satisfaction so that we can maintain our competitive edge in having a robust customer base, while continuing to invest back into the customer experience and maximize our customer lifetime value.

Contoso Coffee are very interested in providing customers with the capability of asking questions about their order status, delivery time, and even the ability to be able to modify their order and cancel it. This will unlock a lot of capability for their call center staff and be able to help with deflecting common questions that take a lot of time on the phone, making both

customers and agents happier and have more time. They also highlighted briefly that in B2B scenarios where they often work with other manufacturers, they would like to provide access for those partners the ability to view and ask questions around latest invoices or payments or be escalated to live agents if they are in a specific tier of manufacturer.

Customer support costs have continued to rise as the customer base has grown, and the company can no longer continue to expand the Customer Support team. You have been tasked with finding a solution using Power Virtual Agents.

Pre-requisites

Please note that some labs, especially later labs, do reference previous labs in reference to capabilities and previous tasks. The labs have been designed so as long you have access to a Power Virtual Agent trial which has Unified Authoring Preview available, you can get started from any lab without having to complete the previous module to be able to move forward.

For Lab 01 – Planning your first chatbot, we recommend you completing the following labs to get the best experience:

- Lab 00 – Overview

Preview Material Notice

Please note that this material is provided is under continuous development and is targeted at the Preview version of Power Virtual Agents, Unified Authoring, released in public preview on November 10th. Please expect the product to change as the preview period continues and so some of the screenshots or text descriptions may not be what you experience in the latest version of preview in your environment.

We would appreciate your feedback on Power Virtual Agents Unified Authoring and on this hands-on-lab, such as the quality of documentation and the usefulness of the learning experience.

Please use the survey at https://aka.ms/pvaiadpreviewsurvey to share your feedback.

You may provide feedback for each module as you complete it or at the end once you've completed all the modules. Thank you!

Task 1: Ideation

It is important to start by setting goals for the bot when implementing any business system or process to ensure we enable business value. The **Bot Building Handbook** discusses these goals as three core areas: Delivery Goals, Business Goals and Chatbot governance. Some of these areas may be more 'critical' than others depending on the organization's requirements. However, from projects we have found all three areas have importance when aiming for success in projects. Complete the following actions:
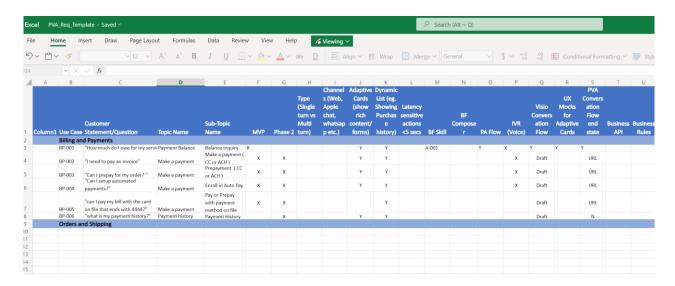
1. Open Microsoft Word or another note taking app.

2. Consider what your project goals could be for building a bot. You can use your own company as an example, or you can use our fictional scenario regarding Contoso Coffee outlined in the previous section. Key questions to ask are:
    - Do you have any go live target dates?
    - Are there any number of expectations around target use cases or questions that the bot should answer?
    - Are there any requirements about connecting with other systems e.g. service ticket systems?

3. Now take a look at Business goals which can be tracked once the bot has been delivered and is live.
    - Are there any expectations around resolved session percentage? (Increasing this is a standard expectation)
    - Does this business want to track Escalated session percentage? (Decreasing this is normally the aim over time)
    - Monthly active users

4. Now look at Application lifecycle goals which help with the ongoing management after the bot is initially deployed and how to make improvements to the bot based on data
    - Are there any goals on application lifecycle management?
    - What process is there to onboard new chatbot authors?
    - How often would metrics be reviewed and how would that take place?

Task 2: Requirements Gathering – Topic Planning – Part 1

A key part of requirements gathering is topic generation. It is recommended you work with your company and determine the key topics that would be critical based on your ideation exercise outcome above to focus on.

For this session and for the fictional use case of Contoso Coffee, you can begin to write down what you believe the key topics based on their data outlined in the previous section should be. This action promote critical thinking and supports you to become more experienced in requirements gathering. In a real world scenario, you would have meetings where you can ask questions of key stakeholders involved, and also you may even have access for systems to suggest topics or provide automated analytics or generation to help speed this process up.

1. Open the **Requirements Gathering Spreadsheet** from the **Bot Building Handbook**, as shown below

2. Review the demo data that the spreadsheet comes with and how it is presented.

3. Now, turning to Contoso Coffee, what are the key categories or use case areas under which the bot will have topics? An example is in the scenario above, they expressed they wanted a customer to ask about order status, so a category could be 'Orders and Shipping'. Create new sections in the spreadsheet (or tabs) to lay out the different categories (as shown with the blue row highlight in the spreadsheet)

4. Now you have key categories, identify the list of topics for each category, and what a typical question may be in that topic. You can enter more than one, and you may want to break this down into 'sub topics' as shown in the template depending on how detailed your requirements gathering exercise is. Complete this for all of your topics in all of the categories you have identified.

   To take the example from the previous step, a common customer question under the category **'Order and Shipping'** may be **'What is the status of my order?'** and the topic name may be **'Check Order Status'.**

   Pro Tip! There is no real wrong way to do this, except not logging anything down at all. It is common for makers to skip this stage because it seems basic and time consuming, however as discussed in the Bot Building Handbook and the Introduction presentation, this requirements gathering is critical for success when authoring bots, as you begin to find and determine true value for the people you are building bots for through these exercises.

Task 3: Requirements Gathering – Topic Planning – Part 2

Now let's look at completing the rest of the spreadsheet.

1. Open the **Requirements Gathering Spreadsheet** from the **Bot Building Handbook**, as shown below. (You should have this open still from the previous Task)

2. Now you have your categories, topics, subtopics and customer phrases, you can begin to break down what is critical for the 'MVP' delivery (Minimum Viable Product) and what can be delivered in phases afterwards. Mark those needed for MVP in the MVP column.

3. Determine which topics are single or multi-turn topics. For those identified as muti turn topics, complete the other columns in the sheet for example:
    a. Goal of the topic
    b. What is needed from the user in this topic?
    c. What is needed from a data source in this topic (see below for extended questions in this area)
    d. What data needs to be secured?
    e. What is the exit conditions for each goal

4. Consider the channels needed for this topic (being mindful PVA does not support 'all' channels)

5. Do any topics need to get data from a data source? If so, where is that data stored and could Power Automate be used to get that data?

At this stage you have completed all the basics for requirements gathering using the requirements gathering template. There are extended scenarios and more data you can complete in this spreadsheet outlined in the extra practice section below. This section covers more deeper areas, for example knowing when to extend Power Virtual Agents with code, conversational design in Microsoft Visio and stakeholder approval.

Extra Practice

Power Virtual Agents aims to democratize Conversational AI and to do that it provides no code, low code and pro code experiences. The requirements gathering spreadsheet also covers additional information you can gather when planning your bot that will help build and accelerate knowledge of the expected project scope to be able to get the right fusion team together to deliver what is expected.

Explore the rest of the spreadsheet to determine if other topics such as latency, IVR requirements, or if code is required using Bot Framework Skills. This could require going further and design the expected conversation flow in a tool such as Microsoft Visio. You may require a team member with more detailed knowledge on extending Power Virtual Agents for some of these tasks and they are not required to complete this lab.

It is recommended you review the **Bot Building Handbook**, included as part of the materials for the course to understand what a full project using Power Virtual Agents includes.

Summary

Thank you for completing Lab 01 'Creating your first chatbot'. You have successfully:

- Planned the goals and intent for creating a bot for either your company or Contoso Coffee
- Downloaded the requirements spreadsheet from the Bot Building Handbook
- Completed the topic and subtopic section of the requirements spreadsheet, understanding key topics for an MVP release
- Extended the requirements by understanding key customer questions and extra information such as if specific data needs to be involved or access

Lab survey

We would appreciate your feedback on Power Virtual Agents and on this hands-on-lab, such as the quality of documentation and the usefulness of the learning experience.

Please use the survey at https://aka.ms/pvaiadpreviewsurvey to share your feedback.

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