Microsoft Power Virtual Agents in a Day

Lab 06: Build Power Automate Flows for your Chatbot

Hands-on Lab Step-by-Step

January 2022

Contents

Power Automate

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Goals for this lab

|	What you'll learn:		
	• Create a Power Automate flow from the chatbot authoring canvas • Create a topic that can send information obtained by the chatbot to a user in Microsoft Teams		The time to complete this lab is [35] minutes.

Scenario

In this scenario, you will be creating a new topic for the chatbot for handling customer issues with their devices that they have purchased from the store. In this topic, the chatbot will collect information such as the customer's name, email address, what device they have, and a description of the issue. A flow will then send these details as a message in Microsoft Teams to the user who handles these issues.

Before we start...

Navigate to https://powerva.microsoft.com/ and sign in with your credentials.

Task 1: Create a new entity

1. Click **Entities** in the left navigation pane.

2. You will create an entity for Device Manufacturers. To do this, click on **New entity**. Select the **Closed List** option.
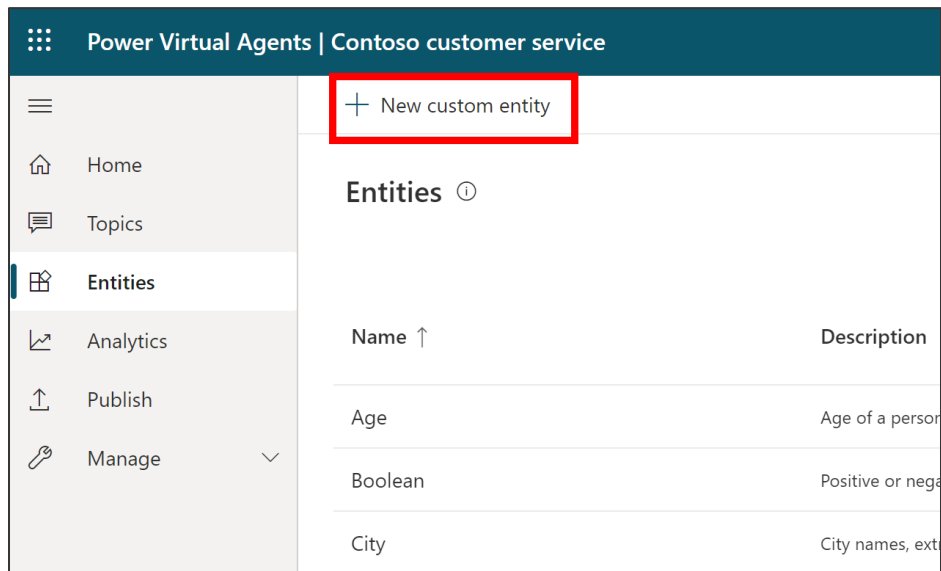
3. Enter **Device Manufacturer** as the **Entity Name**. Ensure Smart matching is turned on. Add each of the following as an item in the entity:

    Acer

    Asus

    Dell

    HP

    Microsoft

    Lenovo

    Samsung

    Sony

    Toshiba

Device Manufacturer   ✕

Name *

| Device Manufacturer |

Description

| Description (optional) |

Method

List

The bot will try to match an item on the list based on what the customer says.

Modified by
2 minutes ago

Smart matching

◉ on

The Smart matching option enables the bot's understanding of natural language. This can help match misspellings, grammar variations, and words with similar meanings.

If the bot isn't matching enough related words, enhance the bot's understanding further by adding synonyms to your list items.

Learn more about entities

List items

| Enter item | Add |

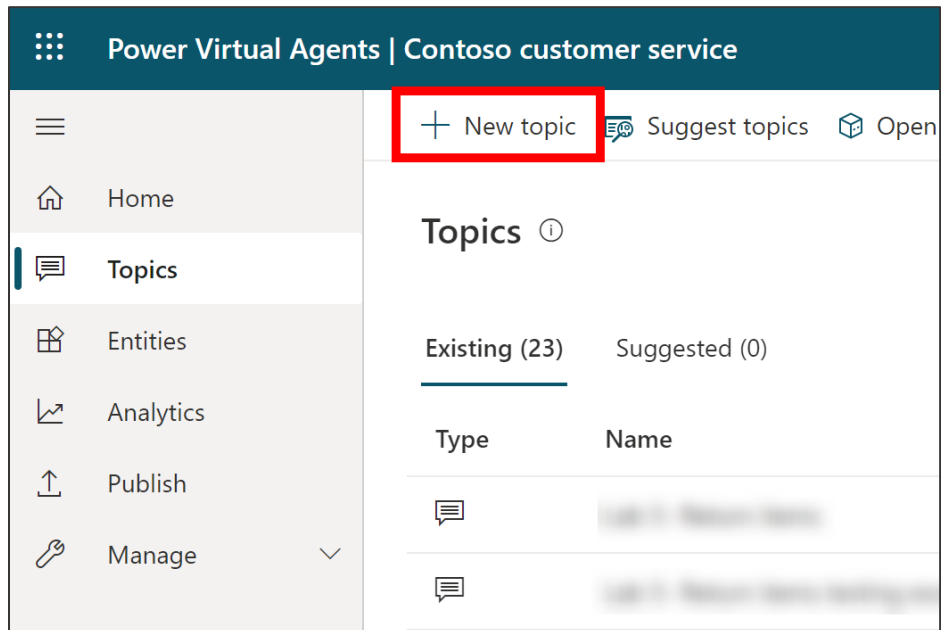| Item	Synonyms
Acer	＋ Synonyms
Asus	＋ Synonyms
Dell	＋ Synonyms
HP	＋ Synonyms
Microsoft	＋ Synonyms
Lenovo	＋ Synonyms
Samsung	＋ Synonyms
Sony	＋ Synonyms
Toshiba	＋ Synonyms

Save   Close

4. Save the entity and close the entity window.

Task 2: Create a new topic

1. Click **Topics** in the left navigation pane and click on **New topic**.
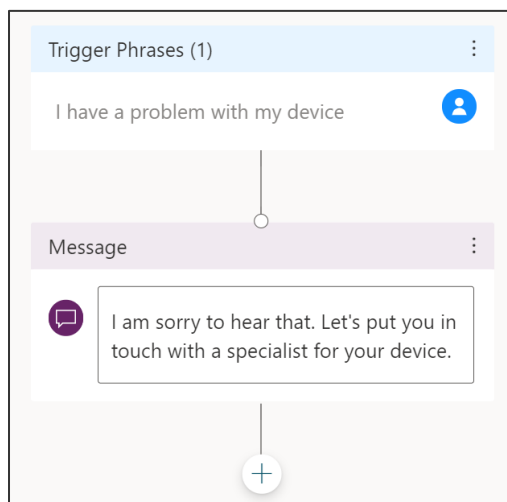

2. Enter **Device Complaints** as the topic name.

3. Add **I have a problem with my device** as a trigger phrase.

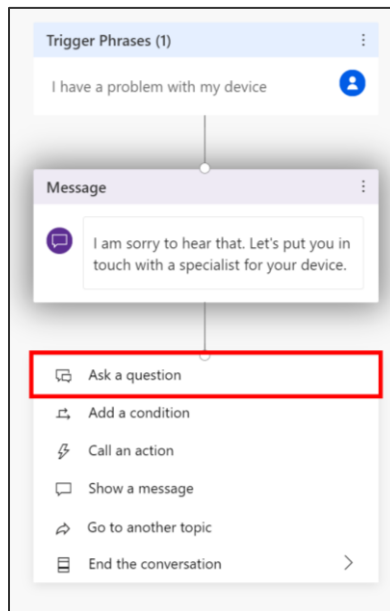4. At the top right, click **Save topic**.

Task 3: Author the conversation

1. Click on **Go to authoring canvas**

2. In the first **Message node**, copy and paste the following text:

I am sorry to hear that. Let's put you in touch with a specialist for your device.

3. Under the **Message node**, click the **Add node** button and select **Ask a question**.
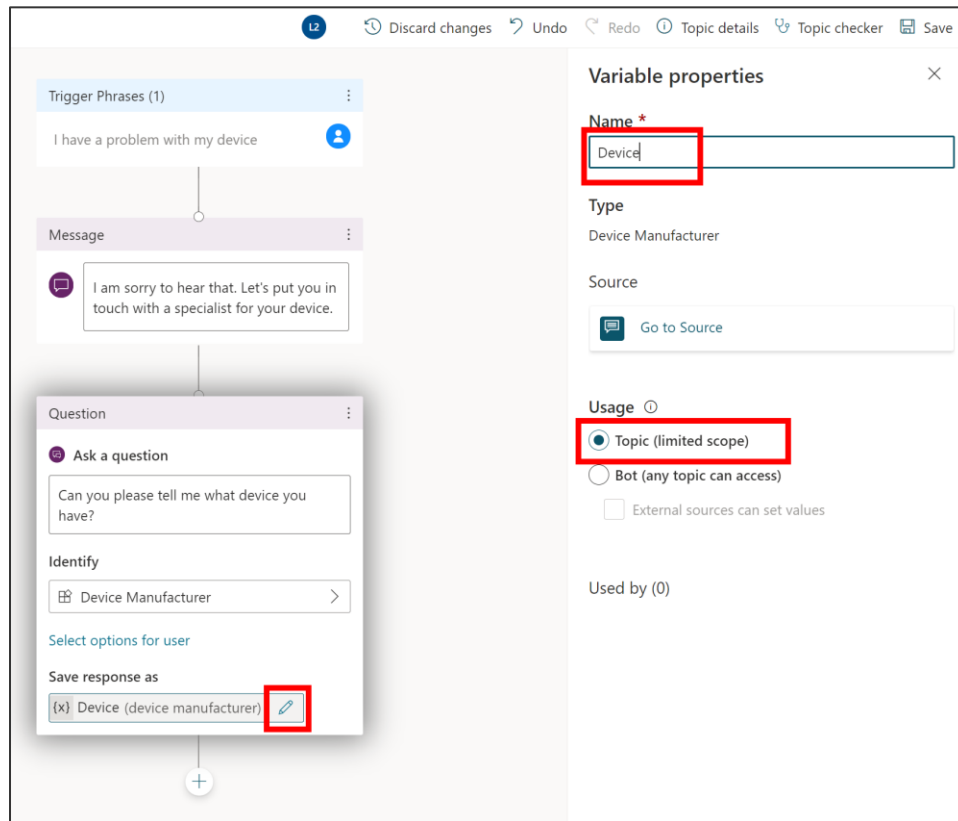

4. In the **Ask a question** area of the **Question node**, copy and paste the following text:

    Can you please tell me what device you have?

5. In the **Identify** area of the same Question node, select **Device Manufacturer**.

    The chatbot will use the entity created in Task 1 to identify who the manufacturer of the device is based on the customer's response.
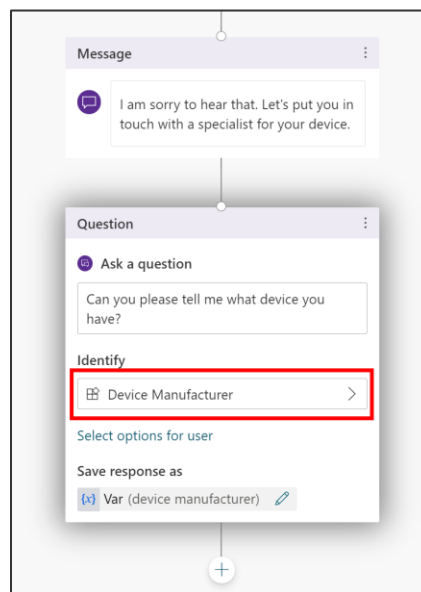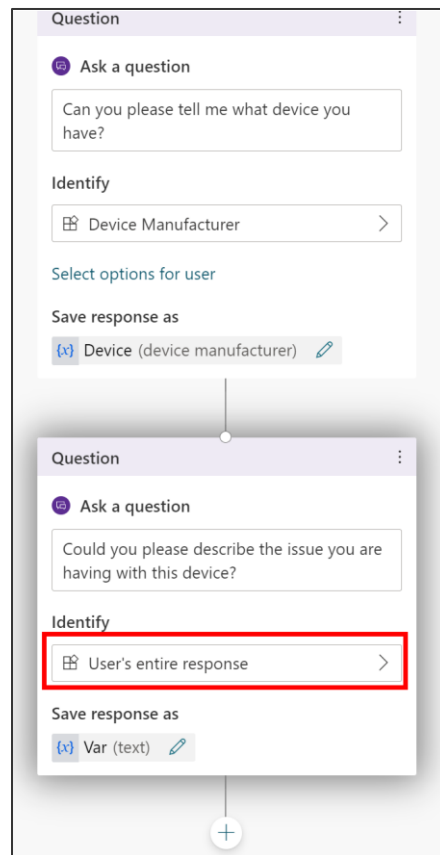
6. In the **Save response as** field, click **Var 1 (device manufacturer)** to open the renaming pane. Rename the variable from **Var** to **Device.** Close the pane to save the new variable name.
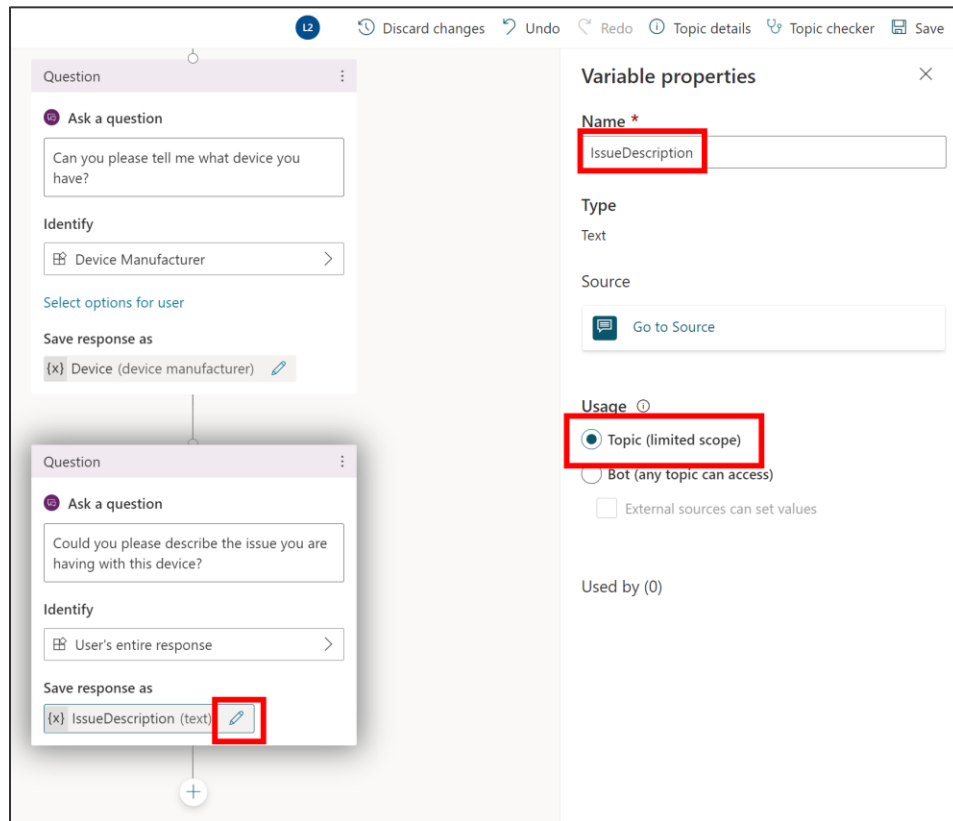

7. Add a new **Question node** underneath. Copy and paste this text in the **Ask a question** area of the new node.

   Could you please describe the issue you are having with this device?

8. In the **Identify** area of the node, select **User's entire response**.

9. In the **Save response as** field, click **Var (text)** to open the renaming pane. Rename the variable from **Var** to **IssueDescription**. Close the pane to save the new variable name.

10. Add a new **Message node** underneath. Copy and paste this text in the new Message node.

> I can pass on these details to our specialist team who look after devices. Let me get some details from you so I can get the team to contact you.

11. In the same **Message node**, place your cursor in between the words **after** and **devices**. You will insert the **Device variable** in between these two words. It should appear as below.
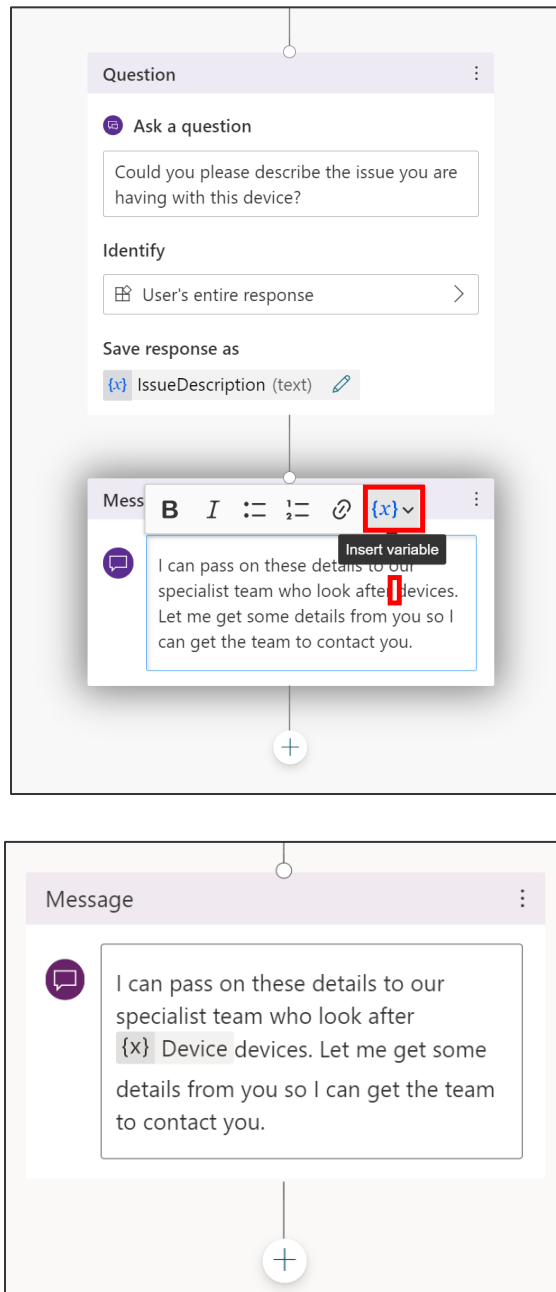
12. You will now add a few more questions to get information about the customer which will be sent to the user handling device complaints. Add a new **Question node** underneath the last Message node.

13. In the new **Question node**, copy and paste the following text in the **Ask a question** area.

What is your name?

14. In the **Question node**, change the value of the **Identify** area to **Person name**. Rename the variable to **CustomerName**. It should appear as below.

15. Add a new **Question node** underneath. Copy and paste the following text in the **Ask a question** area.

What is your email address?

16. In the **Question node**, change the value of the **Identify** area to **Email**. Rename the variable to **CustomerEmail**. It should appear as below.
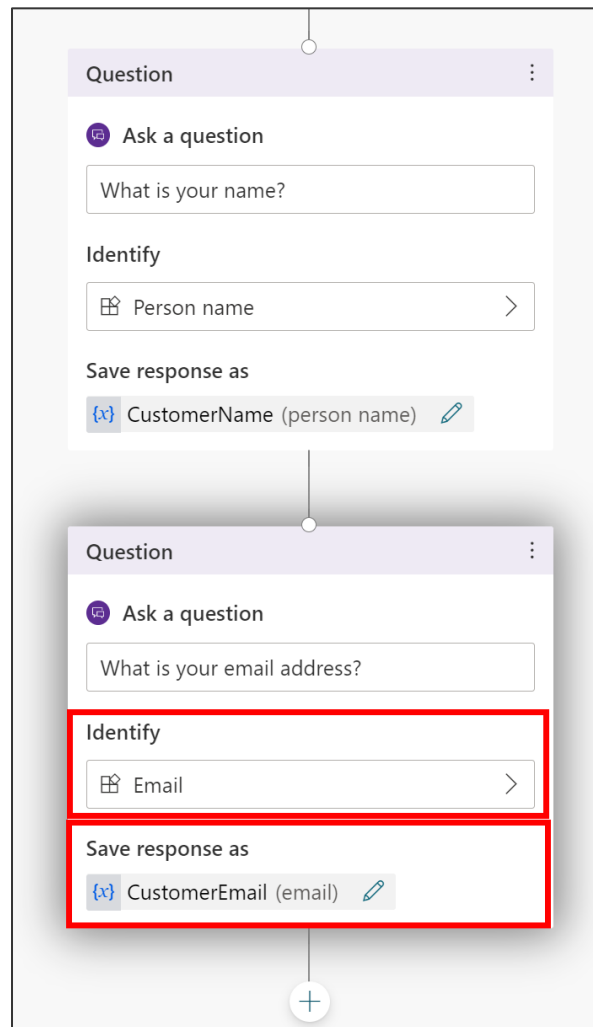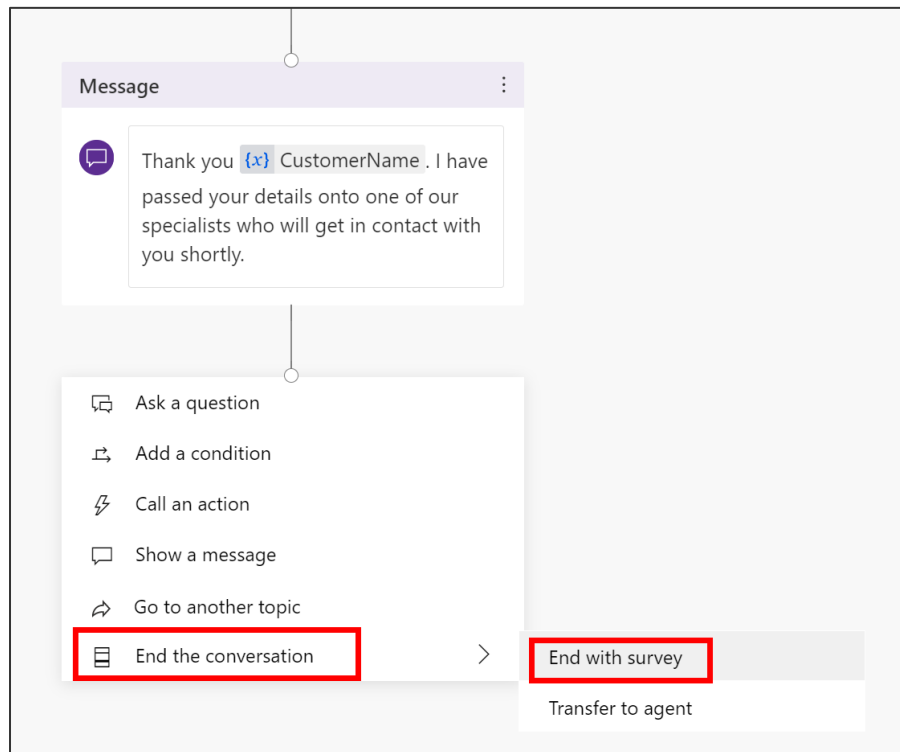

17. Add a new **Message node** underneath. Copy and paste the following text in the Message node.

Thank you. I have passed your details onto one of our specialists who will get in contact with you shortly.

18. In the same **Message node**, place your cursor after the space after the word **Thank you**. You will insert the **CustomerName** variable here. It should appear as below.

19. Add an **End the conversation > End with survey node** at the end.


20. **Save** your chatbot.

Task 4: Create a flow to send the customer's details to a user in Microsoft Teams

Now that you have created the conversation for this topic, you will add in steps to trigger a flow that you will build in Power Automate. This flow will take the details that the customer has submitted during the conversation, and send these details as a message to a user in Microsoft Teams (i.e. the Specialist in this scenario). For the purpose of this lab, the message in Teams will be sent to you as the logged in user for this lab.

1. In your authoring canvas, add a new step in between the **Question node What is your email address?** and the last **Message node**. Click on **Call an action**.
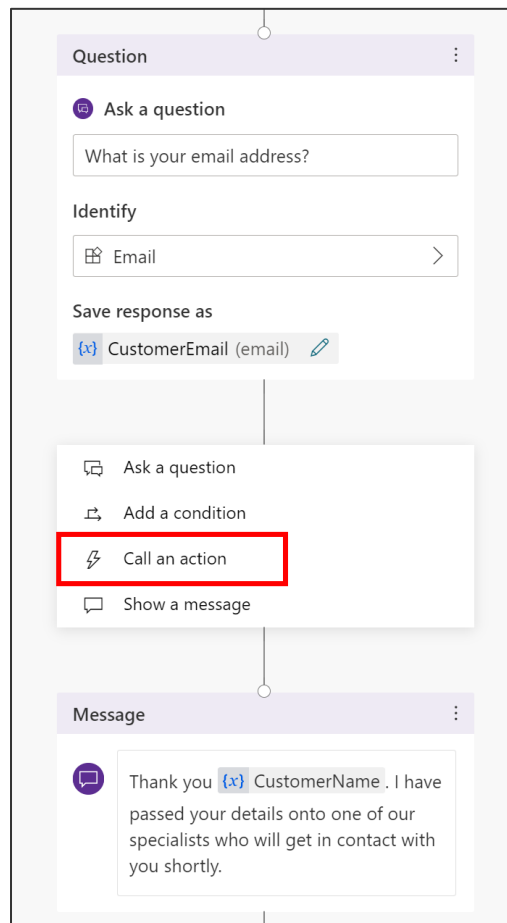
2. In this task, you will be building the flow from scratch. Click on **Create a flow**. This will launch Power Automate in a new tab.
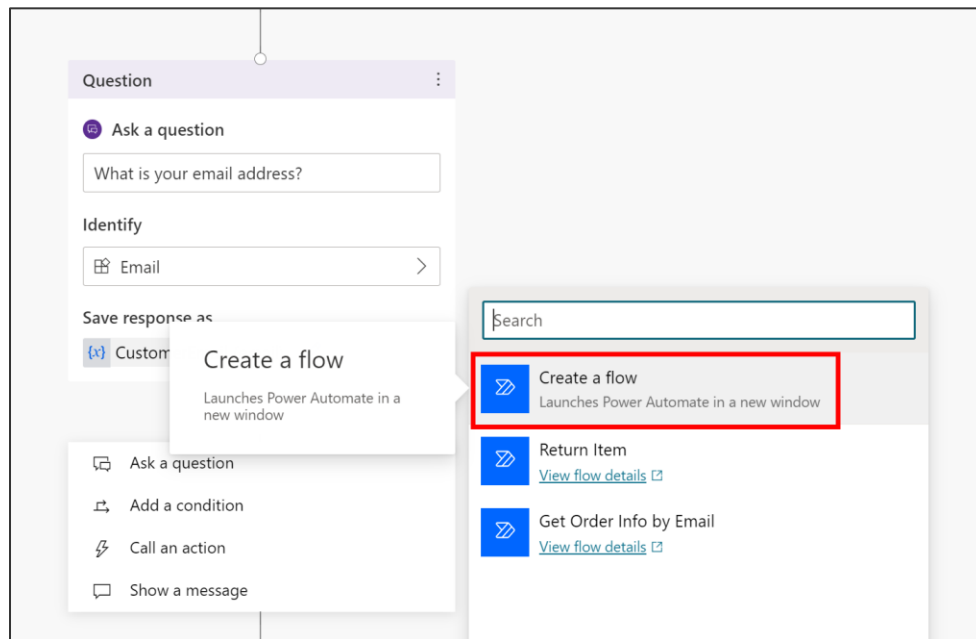

3. Go to the Power Automate tab that launched. You will notice that this flow already has a trigger for Power Virtual Agents. You can now add in actions that you want the chatbot to take during the conversation with the customer.

4. First, click on **Power Virtual Agents Flow Template** written on the top left of the flow canvas. Backspace this text and rename it. Put your User number at the start of the name so that you can easily find your flow later in the lab (other participants will also be creating their own version of this flow in this environment). Your flow name should be: **User # Device Complaint- Send Teams Message**. – e.g **User 1 Device Complaint- Send Teams Message**
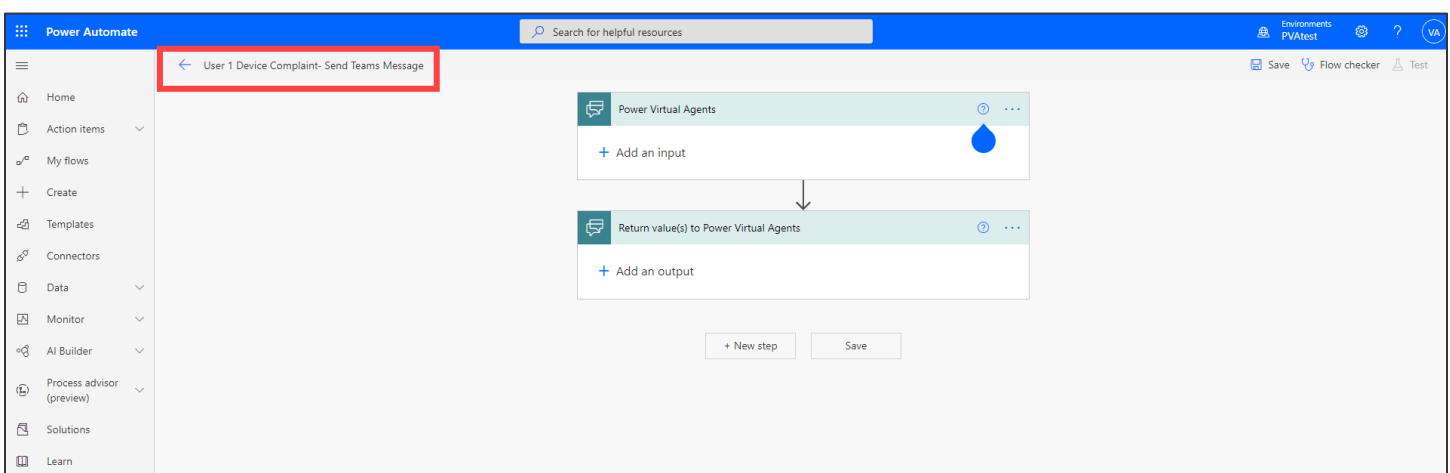
5. In the trigger (first step of the flow), you will add inputs that you want the flow use. These are the variables that the customer has provided us during the conversation with the chatbot. In the **first step of the flow**, click on **Add an input.**
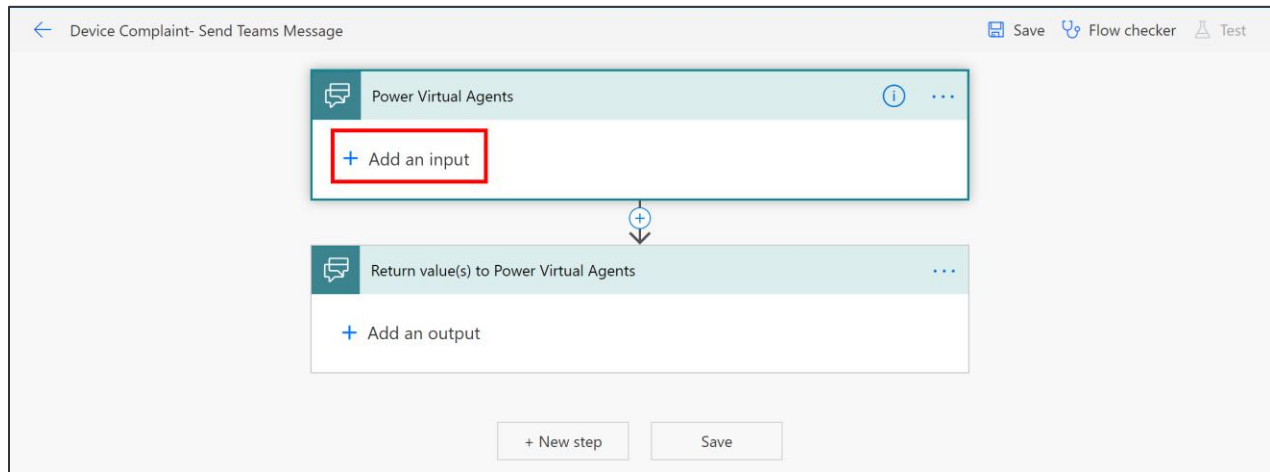
6. Select **Text** as the **input type**. Backspace the word Input from the first textbox that appears, and replace it with **Device Manufacturer**.
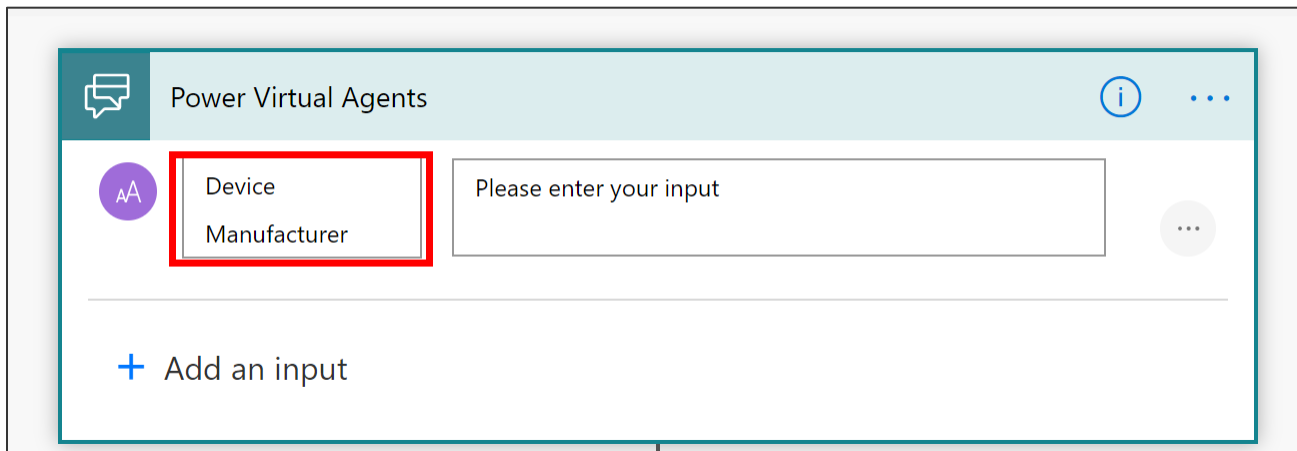
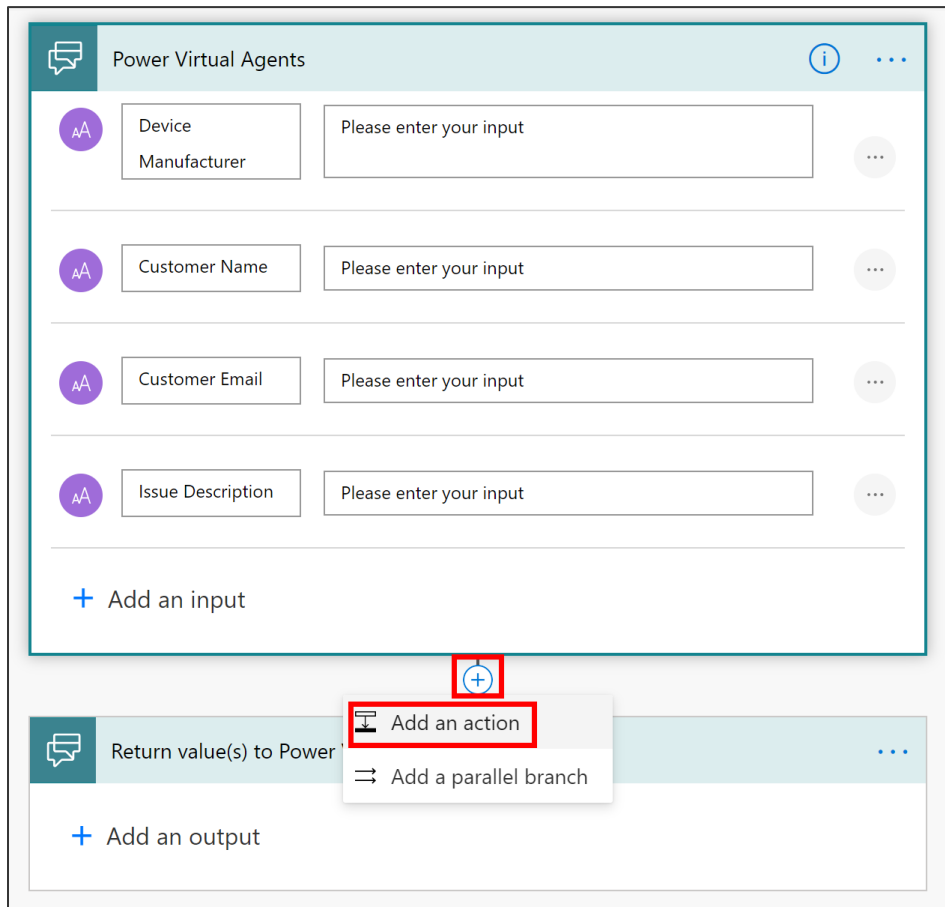7. You will now add more inputs. Repeat step 5 & 6 to add the following inputs.

Customer Name

Customer Email

Issue Description

Your flow should appear as below.

8. Click on the ⊕ button that appears between the two Power Virtual Agent steps. Click **Add an action**.

9. You will now add an action that will post a message to a Microsoft Teams user. In the search bar that appears, search **teams**. Select the action called **Post a message in a chat or channel**.
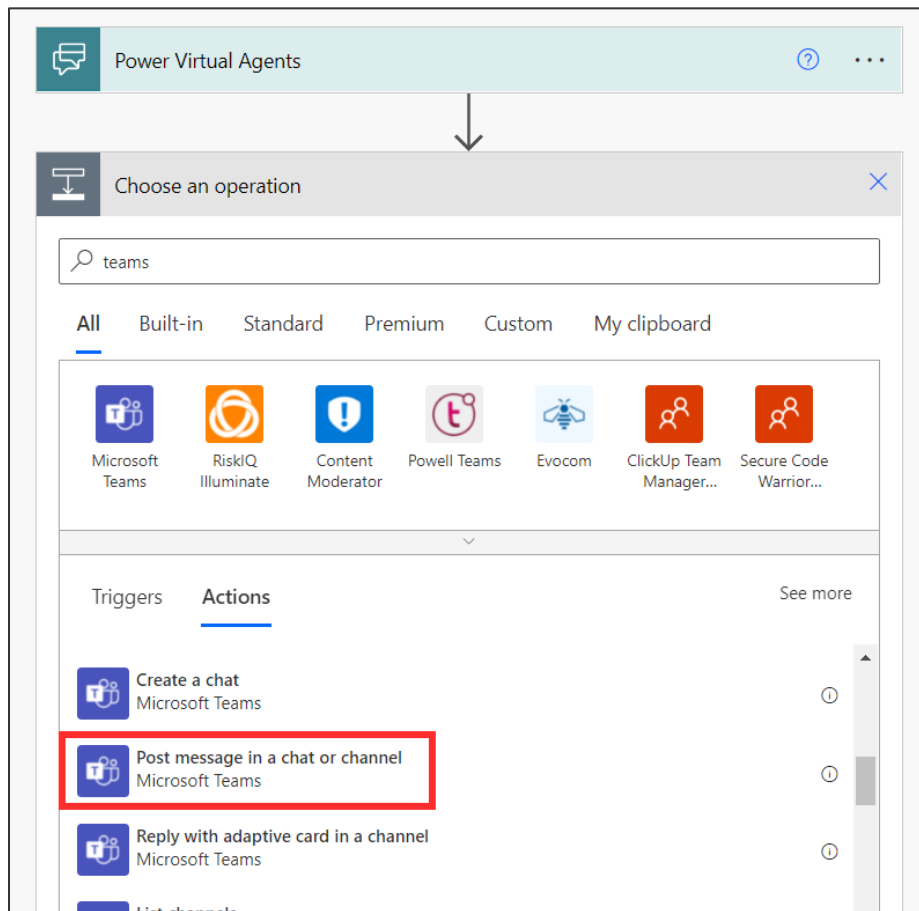
10. In the **Post as** dropdown, select **Flow bot.**

11. In the **Post in** dropdown, select **Chat with Flow bot.**

12. In the **Recipient textbox**, enter the email address of the user you are currently logged in as.

    Note: The purpose of using your lab email address here is for training purposes only, so that you are able to see the result of the flow using your lab account.

13. Copy and paste the following text in the **Message** textbox.

A customer has reported an issue with their device. Please contact the customer to discuss.

Name:

Email:

Issue:

14. You will now add the related dynamic content to this message. In the **Message** textbox, Place your cursor in between the words **their** and **device**. You should see a pop out appear with dynamic content values. Add the **Device Manufacturer dynamic content**.

Note: If you do not see the dynamic content pop out, you may need to zoom out of your browser screen.
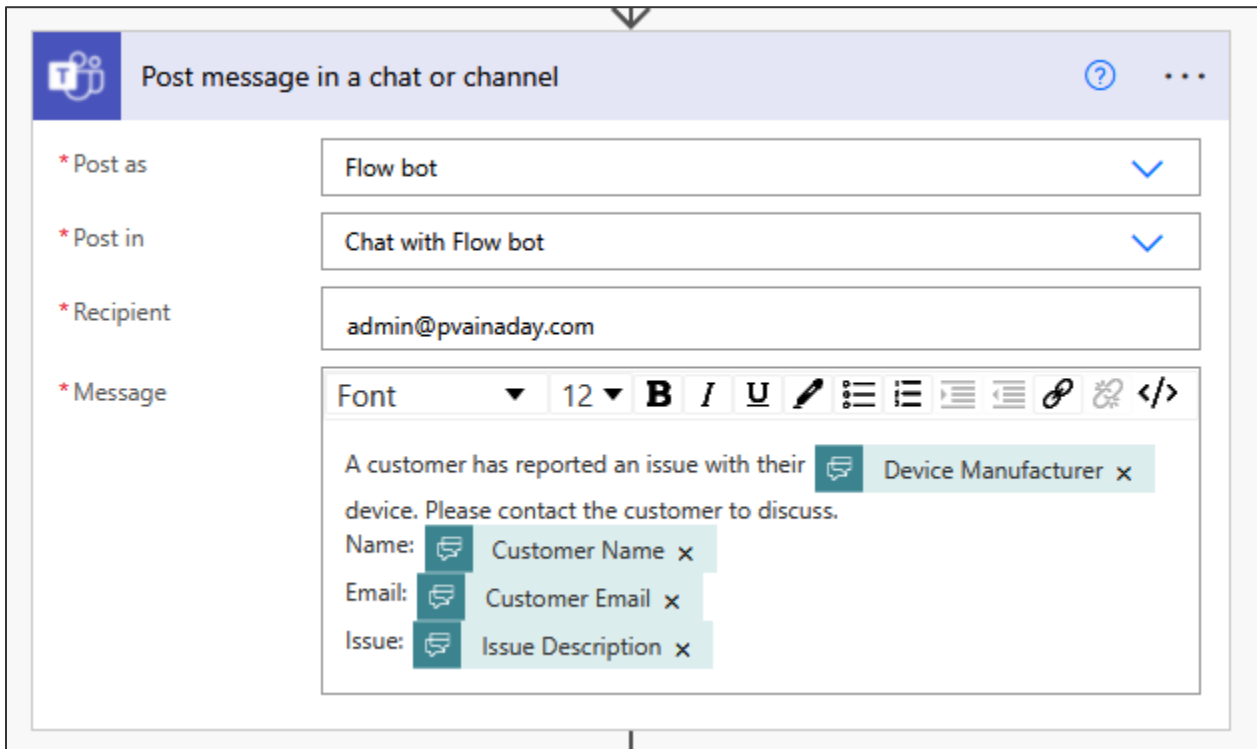
15. Add the following dynamic content next to the other words:
    Name: **Customer Name**
    Email: **Customer Email**
    Issue: **Issue Description**

    Your **Message** textbox should now appear as below.

16. You will add spacing in between each line of the **Message textbox** to improve the formatting of the message once posted to Teams. Place your cursor at each of the lines and press **Enter** on your keyboard to add a line space.

It should now appear as shown below.

17. Click **Save** in the top right of your page
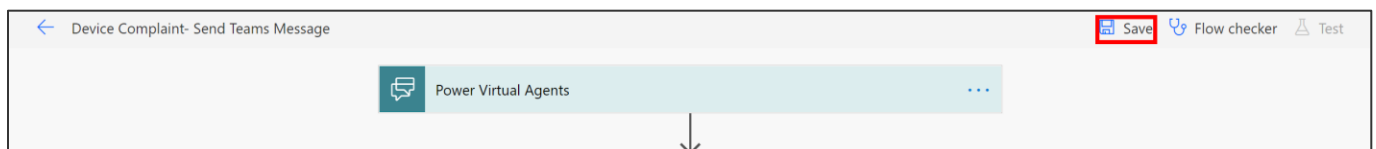
18. Go back to your Power Virtual Agents tab with your Device Complaints authoring canvas. Click on **Call an action** in between your **What is your email address? Question node** and the last **Message node**. Search for your user name (e.g. user 1) in the search box to find your flow. You should now see your newly created flow **Device Complaint- Send Teams Message** appear in your list of flows. Click on it.
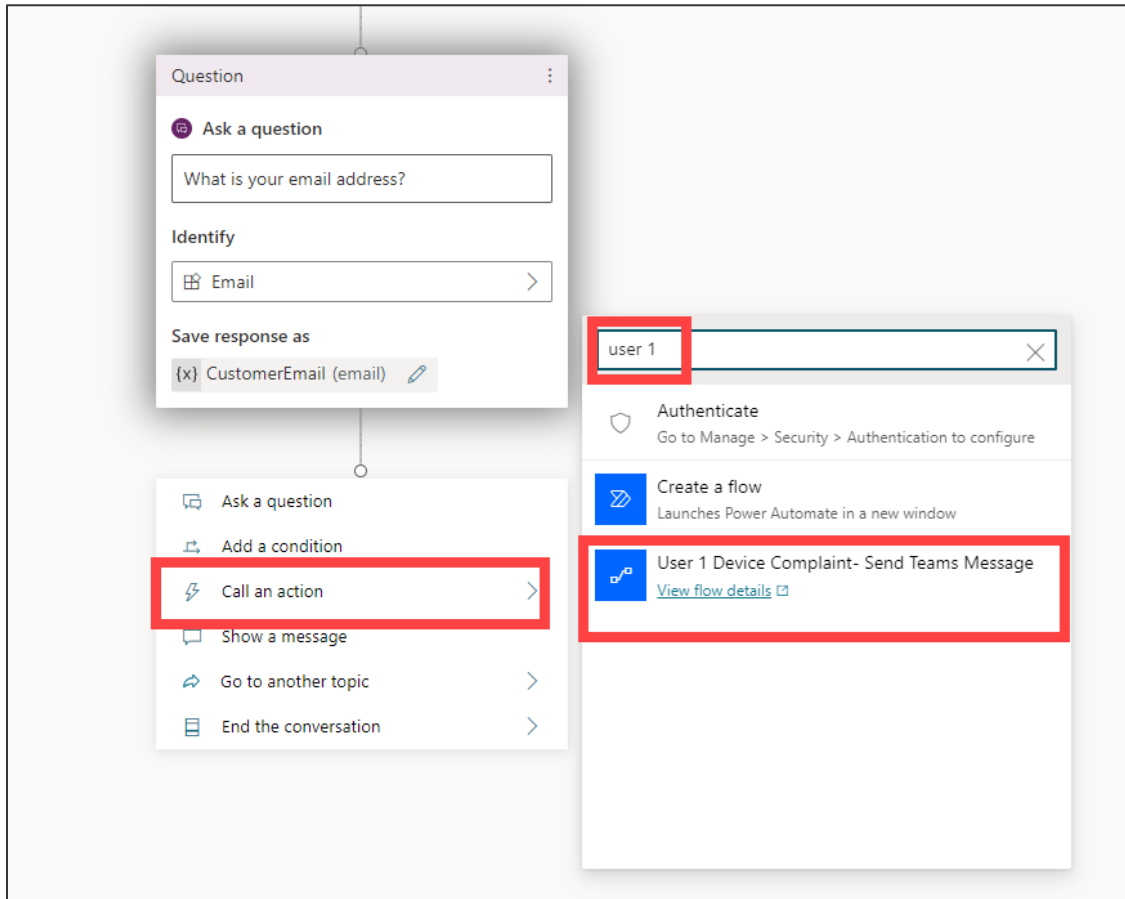
19. You will see an **Action node** appear containing the inputs you identified at the start of the flow. You will need to match these inputs to the variables obtained by the chatbot. Select the corresponding value for each of the 4 inputs as shown below.
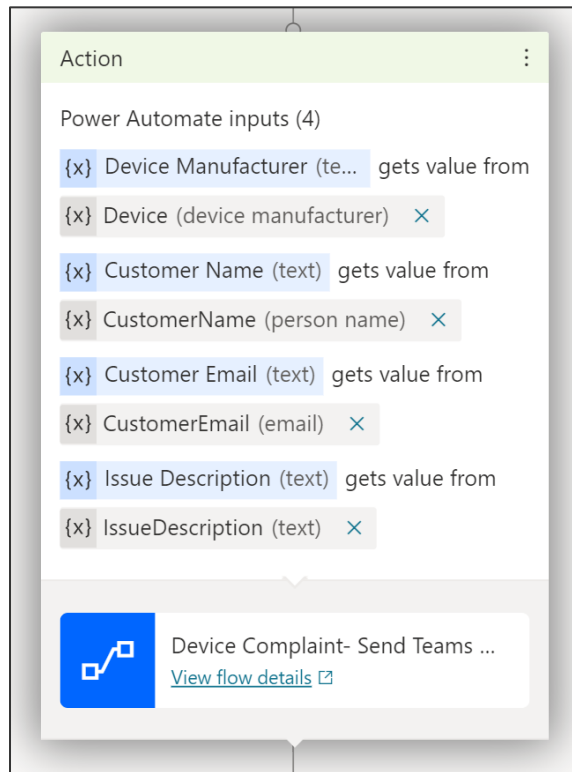
20. **Save** your chatbot.

Task 5: Test your chatbot

1. First, you will open Microsoft Teams in a new tab so you can see the flow work while testing your chatbot. Click on the **waffle icon** ⦙⦙⦙ in the top left of your screen to view your Microsoft applications. Click on the ⋮ icon next to Teams, and click **Open in a new tab**.

2. Go back to your Power Virtual Agents tab with your Device Complaints authoring canvas open. Test your chatbot using the following steps:
   i.   Enter the trigger phrase **I have a problem with my device**
   ii.   Use **Samsung Series 7** as your device (you can try another device based on the Device Manufacturer entity created in Task 1)
   iii.   Describe the issue you are having, e.g. **It won't turn on**
   iv.   Enter your name
   v.   Enter an email address (this can be any email address)

3. Check your Microsoft Teams tab. In the **Chat** 💬 section, you should see a message posted from Flow that contains the details you entered during your chatbot session.
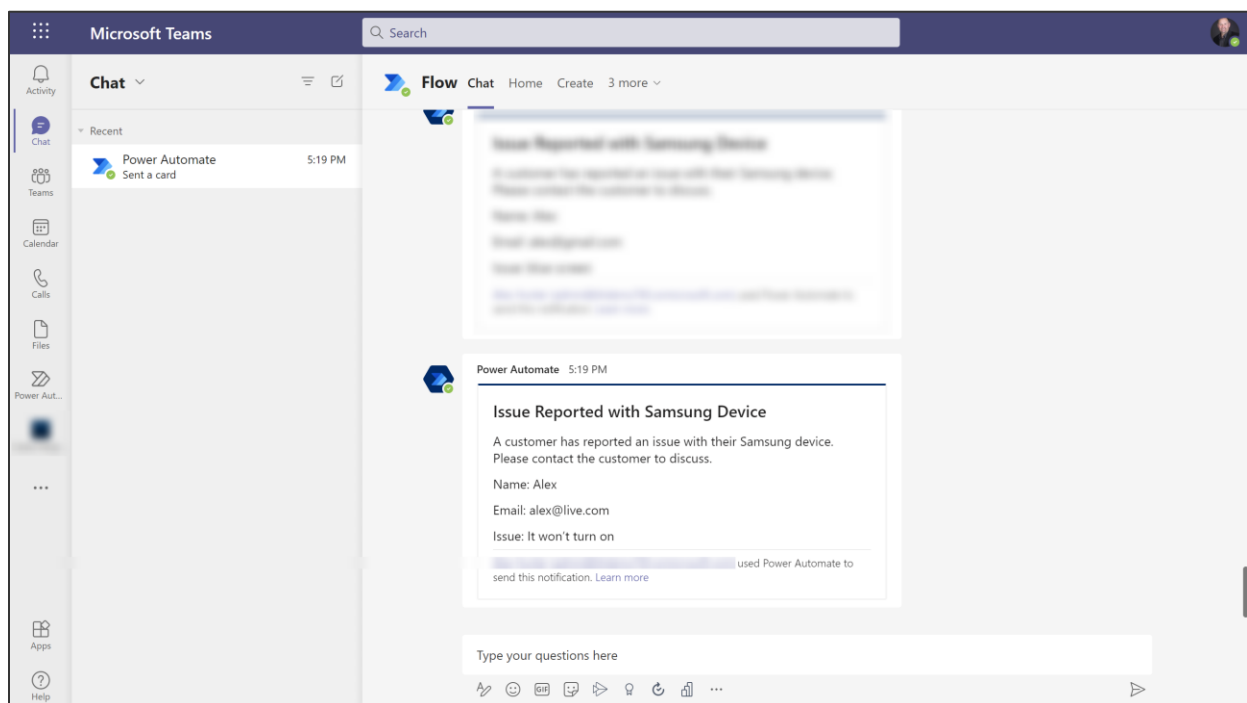
You will see that the chatbot has identified the manufacturer of the device based on the Device Manufacturer entity created at the start of the lab.

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/PVAiaDSurvey 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!

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