



Summarize Text Automatically by Using Azure Al Language Services

Challenge Overview

Understand the scenario

You are a Developer for Hexelo, an organization that needs to learn how to summarize text by using Azure® Al Language services.

In this Challenge Lab, you will summarize text automatically by using Azure Al Language services. First, you will create an Azure Al Language service. Next, you will extract key sentences to generate Extractive and Abstractive Summarizations. Finally, you will use Azure Al's Conversation feature to summarize chat transcripts.

Navigating the Challenge Lab

♥ Understanding a Cloud Slice

Your Challenge Lab is using a cloud slice that reflects a dynamic, constantly evolving cloud environment. A cloud slice is a subset of a cloud platform subscription that has been assigned to a user account which was provisioned for you to use for the duration of this Challenge Lab. It provides temporary access to a subset of resources available in a cloud subscription so that you can learn the concepts without having to configure your own subscription. A cloud slice has restrictions on the types of administrative activities that are allowed.

As you complete your Challenge Lab, you may find that the provided guidance is not identical to what you encounter in your cloud slice environment. If you encounter a difference between your cloud slice and the Challenge Lab instructions, please let us know by submitting feedback directly to Challenge Labs feedback so that we may update the content in as timely a manner as possible.

- ∀ Quick tips for navigating the Challenge Lab instructions.
 - K Select the Copy to Clipboard icon to copy the green text.
 - Select the Type Text icon to insert the green text directly into the Challenge Lab environment.
 - An Alert tells you that a task requires extra care.
 - A Note provides additional helpful information for completing a task.
 - A Hint will guide you through a portion of the Challenge Lab.
 - A Knowledge block provides a deeper level of knowledge into a subject. It is a great way to solidify your understanding, but it is not strictly necessary to complete the Challenge Lab.

New to Challenge Labs? Click here to learn more.

∧ Note About Evolving Technology

Azure AI technologies are constantly evolving as Microsoft continues to update, refine, and improve its tools and interfaces. As a result, you may notice slight differences between the instructions in this lab and what you see on your screen. Rest assured, we are actively working to keep all tutorials up to date with the latest features and interfaces. We appreciate your patience and understanding, and we apologize for any inconvenience this may cause.

Create an Azure Al Language service

Hints Enabled



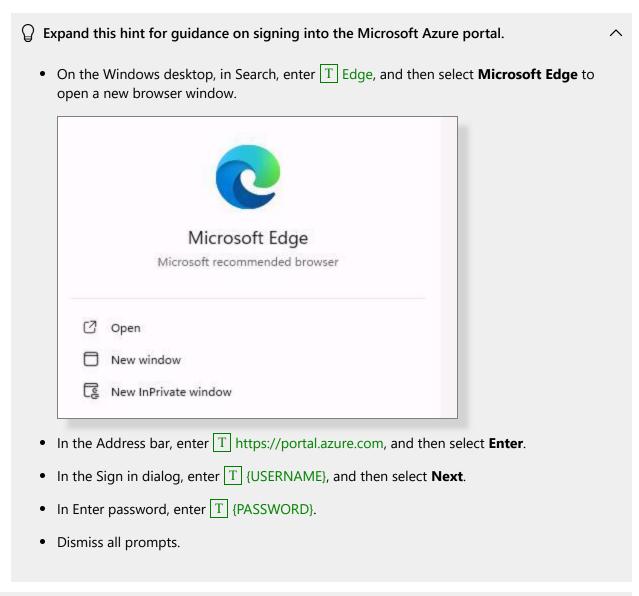
⚠ Note About Evolving Technology

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• Sign into the virtual machine as **Admin** using T Passw0rd! as the password.

Select the T Type Text icon to type the associated text into the current field in the virtual machine.

• Open **Microsoft Edge**, go to T https://portal.azure.com, sign in as T {USERNAME} using T {PASSWORD} as the password, and then dismiss all prompts.

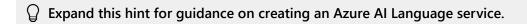


- Want to learn more? Review the documentation on the Microsoft Azure portal.
 - Create a new Azure Al T Language service using the values in the following table. For any property that is not specified, use the default value.

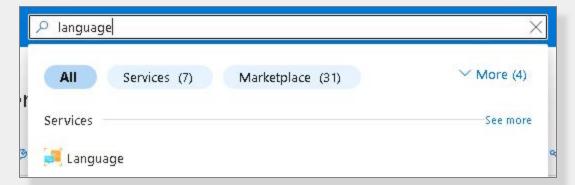
Property	Value
Resource group	RG1{LAB_INSTANCE_ID}
Region	East US
Name	T ExtractiveSummarization{LAB_INSTANCE_ID}
Pricing Tier	S (1K Calls per minute)

Property	Value
Responsible Al Notice	Enabled

You will see a warning message stating that Azure *failed to validate user's role*. In this Challenge Lab, you can ignore this warning message.



• On the Microsoft Azure navigation bar, search for and select \boxed{T} Language.



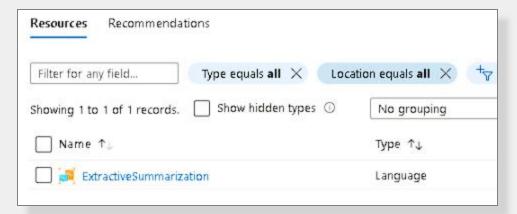
• On the Azure AI services | Language service page, select + Create Language.



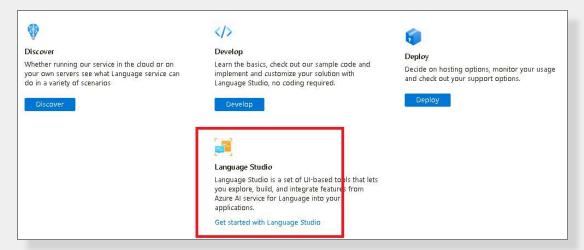
- On the Select additional features blade, select Continue to create your resource.
- On the Create Language blade, on the Basics page, in Project Details, in Resource group, select **RG1{LAB_INSTANCE_ID}**.
- In Instance details, in Region, select **East US**.
- In Name, enter T ExtractiveSummarization{LAB_INSTANCE_ID}.
- In Pricing tier, select **S (1K Calls per minute)**.
- In Responsible AI Notice, select the **By checking this box I certify that I have reviewed** and acknowledge the terms in the Responsible AI Notice. checkbox-ignore the warning message regarding *failure to validate user's role*.
- Select **Review + create**, wait for validation, and then select **Create**.
- Want to learn more? Review the documentation on creating an Azure Al Language service.
 - Create an Extractive Language resource by using the values in the following table. For any property that is not specified, use the default value.

Property	Value
Azure directory	cloudslice
Azure subscription	T Skillable Original Content Dev 01
Resource type	Language
Resource name	T ExtractiveSummarization{LAB_INSTANCE_ID}

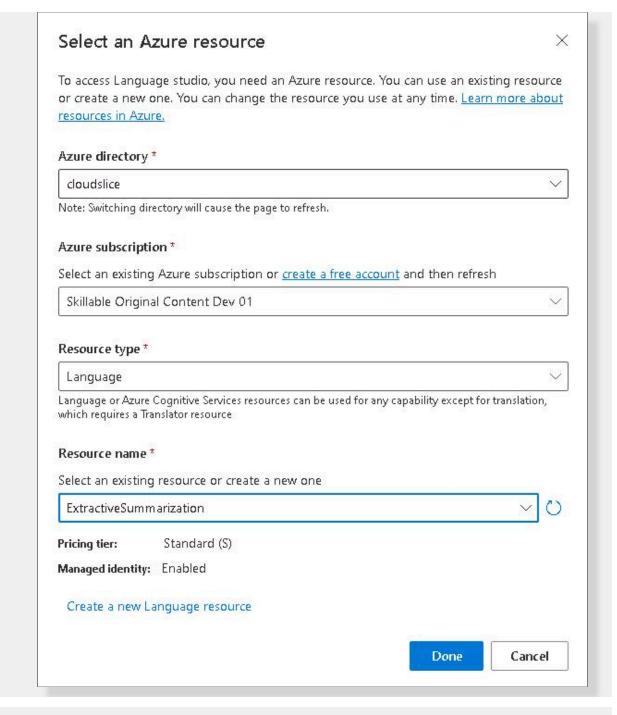
- **©** Expand this hint for guidance on creating an Extractive Language resource.
 - On the Deployment page, select **Go to resource**.
 - On the RG1{LAB_INSTANCE_ID} blade, on the Overview page, in Resources, select **ExtractiveSummarization{LAB_INSTANCE_ID**}.



 On the ExtractiveSummarization{LAB_INSTANCE_ID} | Overview page, in Get Started with Language service, scroll down and then in Language Studio, select Get started with Language Studio.



- In the new Language Studio Microsoft Azure browser tab, in the upper right-hand corner, select **Sign in**, and then if needed, sign in as T {USERNAME} using T {PASSWORD} as the password.
- Close any Welcome messaging, and then in the Select an Azure resource dialog, in Azure directory, confirm that **cloudslice** is selected.
- In Azure subscription, select Skillable Original Content Dev 01.
- In Resource type, ensure that **Language** is selected.
- In Resource name, in Select an existing resource or create a new one, select T ExtractiveSummarization{LAB_INSTANCE_ID}, and then select **Done**.



Want to learn more? Review the documentation on creating an Extractive Language resource.

Check your work

Verify

Extract key sentences to generate a Extractive and Abstractive Summarizations.

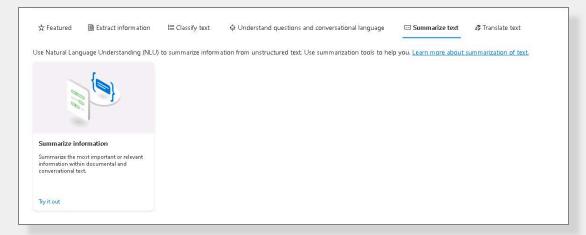
Hints Enabled



• Generate a single sentence **Extractive summarization** in **ExtractiveSummarization{LAB_INSTANCE_ID}** of the **Sample 2** news article, in **English*, with T up to 100 characters.

Expand this hint for guidance on generating an extractive summarization.

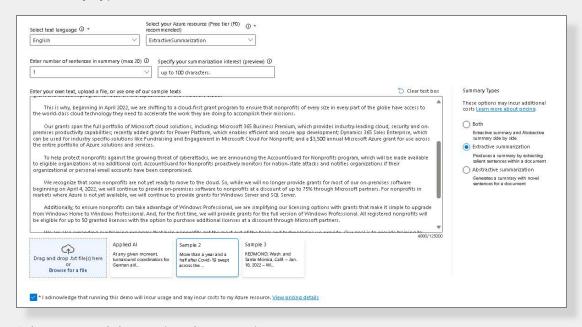
• In Azure AI | Language Studio, in Welcome to Language Studio, on the command bar, select **Summarize text**, and then in Summarize information, select **Try it out**.



- On the Summarize information page, on the Documents tab, in Select text language, select **English**.
- In Select your Azure resource (Free tier (F0) recommended), select **ExtractiveSummarization(LAB_INSTANCE_ID)**.
- In Enter number of sentences in summary (max 20), select 1.
- In Specify your summarization interest (preview), enter T up to 100 characters..
- Just below the *Enter your own text, upload a file, or use one of our sample texts* text box, select **Sample 2**.



- Select the I acknowledge that running this demo will incur usage and may incur costs to my Azure resource checkbox.
- In Summary Types, select Extractive summarization.



Select Run and then review the Extractive summary.



Want to learn more? Review the documentation on generating a single sentence extractive summarization.

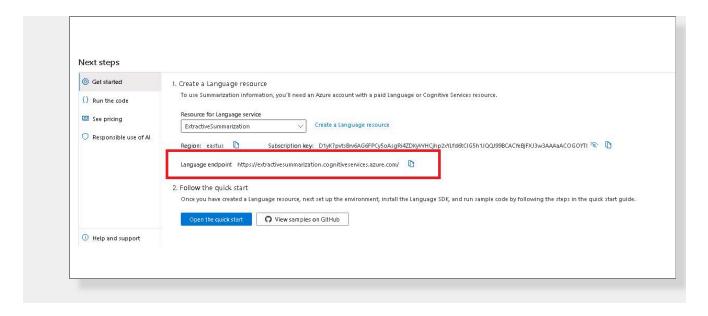
Record the JSON rankScore in the following JSON rankScore text box:

JSON	rank	Score		

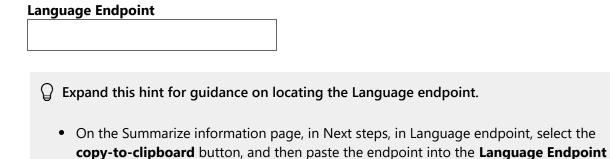
- Expand this hint for guidance on locating the JSON rankScore.
 - On the Summarize information page, in Examine the results, select the **JSON** tab.
 - Just below the Extractive Summary, obtain the rankScore value and record it in the JSON rankScore textbox in the Challenge Lab instructions.

Generate a two-sentence Abstractive summarization in
 ExtractiveSummarization{LAB_INSTANCE_ID} of the Sample 2 news article, in Spanish, with T
 up to 50 characters.

- © Expand this hint for guidance on generating an extractive summarization.
 - On the Summarize information page, on the Documents tab, in Select text language, select **Spanish**.
 - In Enter number of sentences in summary (max 20), select 2.
 - In Specify your summarization interest (preview), enter $\lfloor T \rfloor$ up to 50 characters..
 - In Summary Types, select **Abstractive summarization**.
 - Select **Run** and then in the Extractive summary, review the Next steps.
- The Executive Summary results in Next steps should look like the following screenshot:

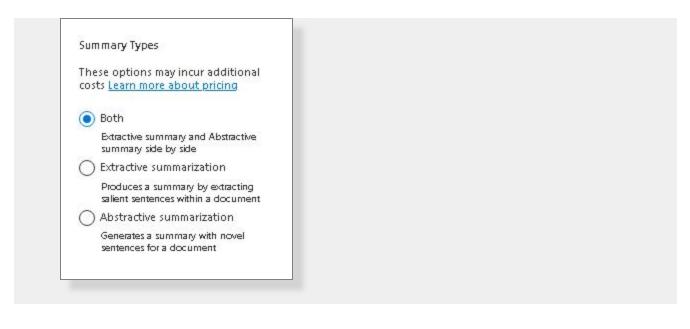


• Record the Language Endpoint in the following Language Endpoint text box:

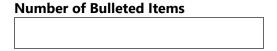


text box in the Challenge Lab instructions.

- Generate a **four**-sentence summarization in **ExtractiveSummarization{LAB_INSTANCE_ID}** of the **Sample 2** news article, in **English**, that uses **both** extractive and abstractive methods with T up to 100 characters.
- The Summary Types configuration should look like the following screenshot:



 Record the total number of bulleted items in the Executive Summary in the following Number of Bulleted Items text box:



© Expand this hint for guidance on reviewing summaries.

On the Summarize information page, in Examine the results, on the Result tab, count the
total number of bulleted items, and enter that number in the Number of Bulleted Items
text box in the Challenge Lab instructions.

Check your work

Verify

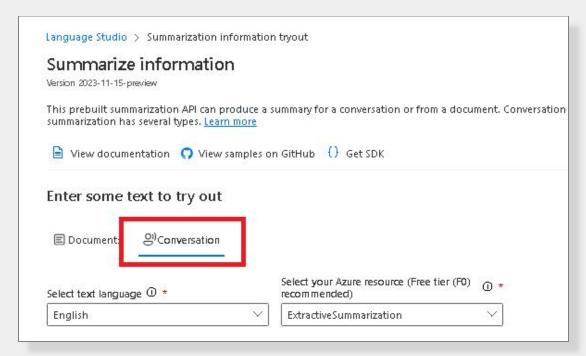
Use Azure Al's Conversation feature to summarize chat transcripts.

Hints Enabled



• Generate a **recap** of **ExtractiveSummarization{LAB_INSTANCE_ID}** chat transcripts in **English** by using Azure Al's **Conversation** feature.

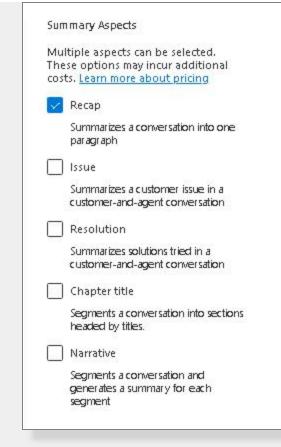
- ② Expand this hint for guidance on using Azure Al's Conversation feature to provide a recap of a transcript.
 - On the Summarize information page, in Enter some text to try out, select the **Conversation** tab.



- In Select text language, select **English**.
- In Select your Azure resource (Free tier (F0) recommended), select ExtractiveSummarization{LAB_INSTANCE_ID}.
- Just below the *Enter your own text, upload a file, or use one of our sample texts* text box, select the **Setting up WiFi Connection** sample.



In Summary Aspects, select Recap.



- Select the I acknowledge that running this demo will incur usage and may incur costs to my Azure resource checkbox.
- Select **Run** and then review the results.

Result JSON Conversation Summarization Recap The customer contacted the agent for assistance with setting up a wifi connection for their Smart Brew 300 espresso machine. The agent guided the customer through some troubleshooting steps, including holding the wifi connection button for 3 seconds and checking the power light. Despite these steps, the customer did not receive any prompts to connect with the machine via the Contoso Coffee app. The agent then decided to explore other potential solutions.

• Record the **Recap** in the following **Recap** text box:

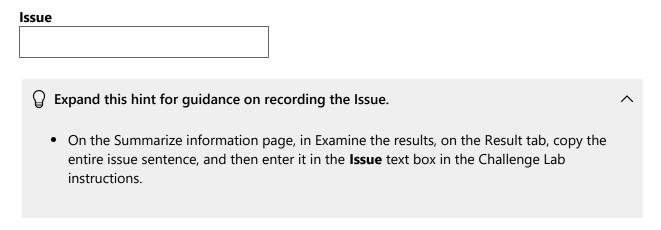
Recap		

- **©** Expand this hint for guidance on recording the Recap.
 - On the Summarize information page, in Examine the results, copy the recap verbiage and then enter it in the **Recap** text box in the Challenge Lab instructions.
- Generate an issue of the chat transcript that summarizes a customer issue in a customer-and-agent conversation by using Azure Al's Conversation feature.

Multiple aspects can be selected. These options may incur additional costs. Learn more about pricing Recap Summarizes a conversation into one paragraph Issue Summarizes a customer issue in a customer-and-agent conversation Resolution Summarizes solutions tried in a customer-and-agent conversation Chapter title Segments a conversation into sections headed by titles.	Sun	nmary Aspects	
Summarizes a conversation into one paragraph Issue Summarizes a customer issue in a customer-and-agent conversation Resolution Summarizes solutions tried in a customer-and-agent conversation Chapter title Segments a conversation into sections headed by	sele incu	ected. These options may ur additional costs. <u>Learn</u>	
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in a customer-and-agent conversation Chapter title Segments a conversation into sections headed by		Resolution	
Segments a conversation into sections headed by	27	in a customer-and-agent	
into sections headed by		Chapter title	
	3 	into sections headed by	
Narrative		Narrative	
Segments a conversation and generates a summary			

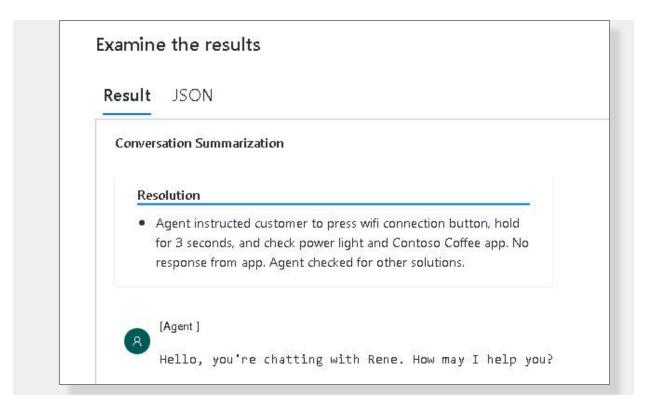


• Record the **Issue** in the following **Issue** text box:

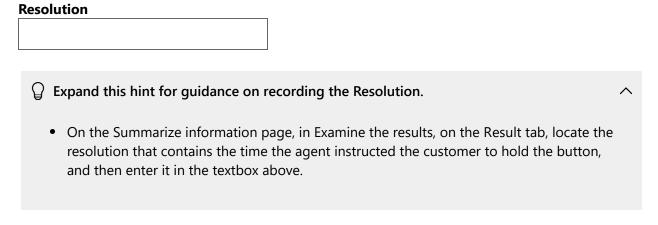


• Summarize the solution tried in the customer-and-agent conversation into a **resolution** by using Azure Al's **Conversation** feature.

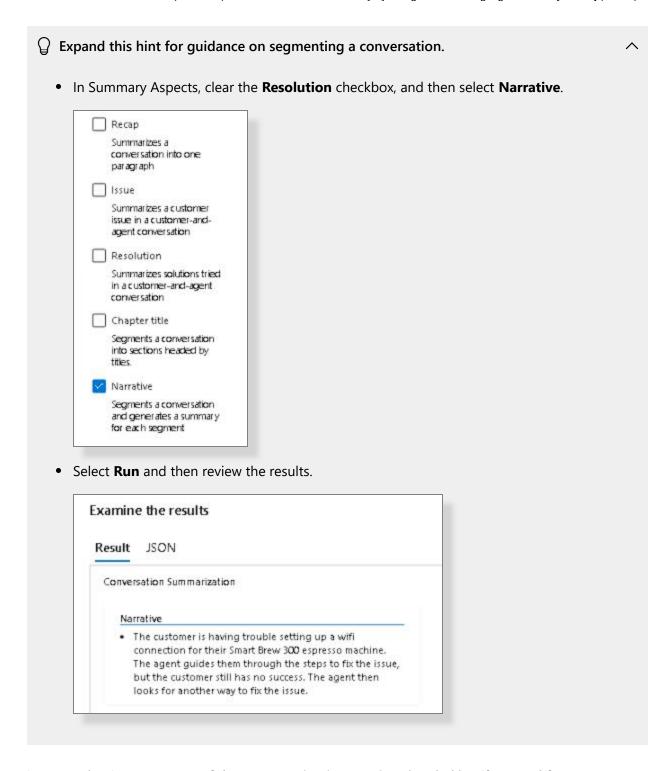
Multiple aspects can be	
selected. These options may incur additional costs. Learn	
more about pricing	
Recap	
Summarizes a conversation into one paragraph	
Issue	
Summarizes a customer issue in a customer-and-agent conversation	
Resolution	
Summarizes solutions tried in a customer-and-agent conversation	
Chapter title	
Segments a conversation into sections headed by titles.	
lect Run and then review the resul	ts.



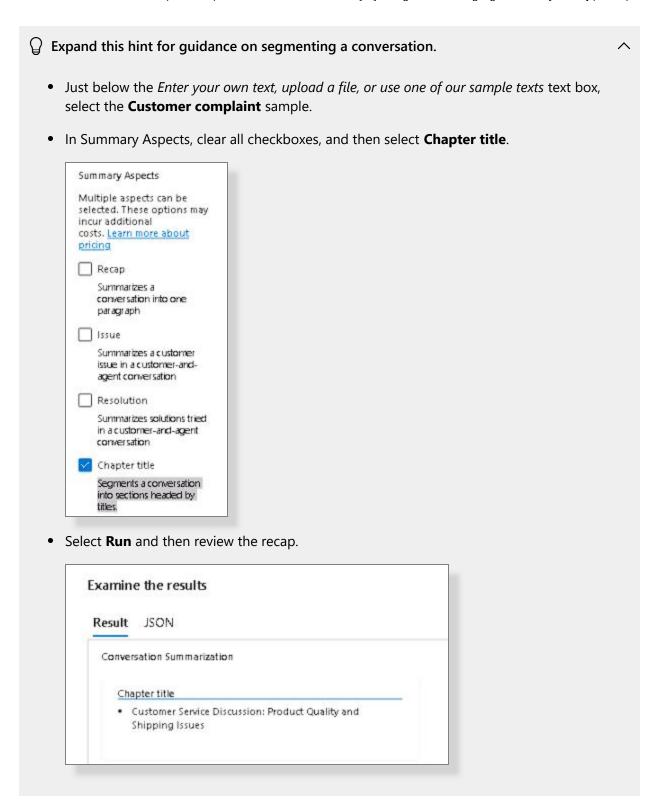
Record the **time** the agent instructed the customer to hold the button in the following **Resolution** text box:



• Segment the conversation in a **Narrative** and then generate a summary for each segment.



• Segment the **Customer complaint** conversation into sections headed by **Chapter titles**.



• Record the entire **Chapter title** in the following **Chapter Title** text box:

Chapter Title		

- **Expand this hint for guidance on recording the Chapter title.**
 - On the Summarize information page, in Examine the results, on the Result tab, locate the **Chapter title**, and then enter it in the **Chapter Title** text box in the Challenge Lab instructions.
- Delete all resources.
 - Expand this hint for guidance on deleting resources.
 - Switch to the Microsoft Azure browser tab, and then select **All resources**.
 - On the All resources page, select **ExtractiveSummarization(LAB_INSTANCE_ID)**, and then select **Delete**.
 - On the Delete Resources blade, in *Enter* "delete" to confirm deletion, enter T delete, and then select **Delete**.

Check your work

Verify

Summary

Congratulations, you have completed the **Summarize Text Automatically by Using Azure AI Language Services** Challenge Lab.

You have accomplished the following:

- Created an Azure Al Language service.
- Extracted key sentences to generate Extractive and Abstractive Summarizations.
- Used Azure Al's Conversation feature to summarize chat transcripts.

Ending your lab

To ensure your lab is recorded as complete, select **Submit** or **End** below. Exiting [X] the lab will result in an incomplete status.

⚠ Once you select **Submit** or **End**, you will not be able to return to this Challenge Lab.

Your feedback is important!

As you end your Challenge Lab, please take a few minutes to complete the short survey that will appear in the next window. Alternatively, you may provide your feedback directly to Challenge Labs feedback.

Looking for your next Challenge Lab?

Below are recommended Challenge Labs to try next.

- Manage Azure Resource Deployment by Using an Azure Resource Manager Template [Guided]
- Manage Azure Resource Groups [Guided]
- Create an Azure Function App [Guided]
- Create an Azure Logic App [Guided]
- Configure an Azure Distributed Denial of Service Protection Plan [Guided]
- Manage Encryption by Using an Azure Key Vault [Guided]
- Configure Azure Role-Based Access Control [Guided]

- Configure an Azure Lock [Guided]
- Configure Monitoring by Using Azure Monitor [Guided]
- Deploy an Azure Virtual Machine [Guided]
- View Azure Service Health Options [Guided]
- Manage Microsoft Entra Users and Groups [Guided]
- Implement a Network Security Group [Guided]
- Azure Cost Management [Guided]