Hands-on Lab: Text Generation in Action

Estimated time needed: 30 minutes

Welcome to the hands-on lab text generation in action!

What is text generation in generative AI?

Generative AI's greatest potential is to generate context-based and captivating content, leading to limitless possibilities for intelligent text generation.

Generative AI-powered models and tools can be used to generate a wide range of text formats, such as articles, blog posts, social media posts, product descriptions, marketing copy, language translation, conversational interactions, and image descriptions, among many more.

In this lab, you will look at the two most popular text generation tools, OpenAI's ChatGPT and Google's Bard and explore how to use them for text generation and text summarization.

Learning Objectives

After completing this lab, you will be able to:

- Explore the text generation capability of generative AI
- Write emails using ChatGPT
- Convert the unit measurement using ChatGPT
- Summarize text using Google's Bard

ChatGPT overview

ChatGPT is an AI chatbot of OpenAI based on GPT's large language models. Generative AI technology understands your natural language prompt and then uses the context to build the response and generate the output.

Exercise 1: Write an email using OpenAI's ChatGPT

Writing an effective email for the required subject and context requires cognitive attention, as you must consider the affirmative language, response aligned with the trail mail, grammar, and so on.

Step 1: Log in steps and the home page

1. Launch [ChatGPT](#) and sign in.

   Note: If you cannot access ChatGPT by clicking on the link, copy the followingh URL and paste it into a browser.
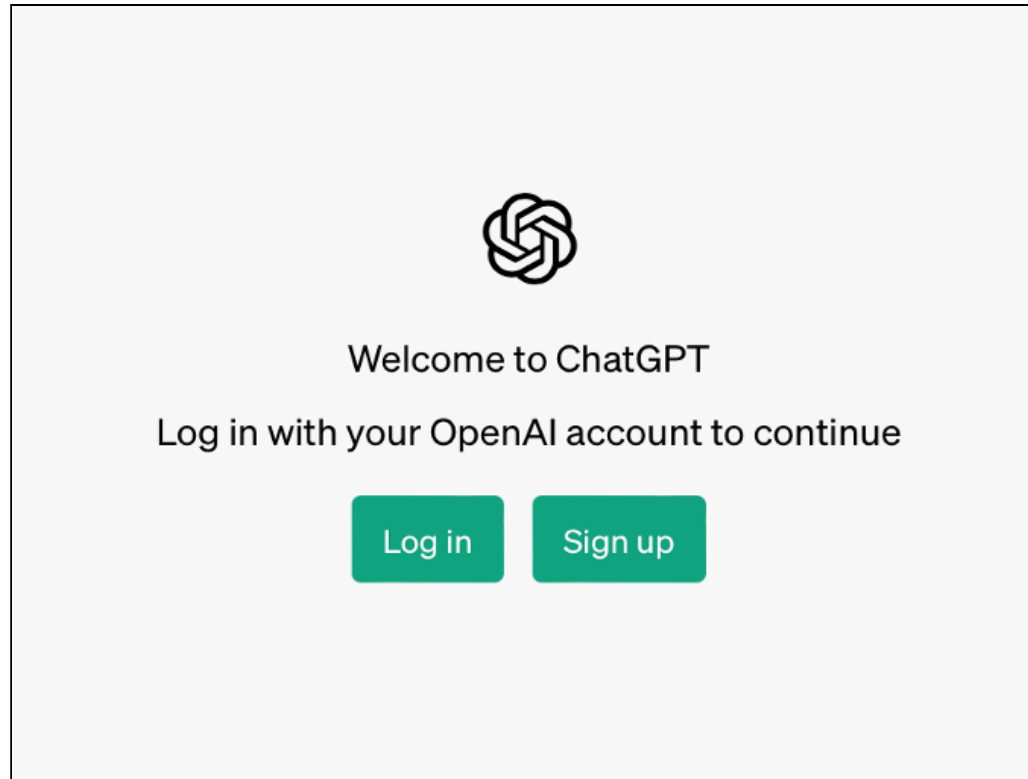
1. 1

1. `https://chat.openai.com/`

[Copied!]

2. Once launched, you must sign up or login.

   Note: You can create a free account on ChatGPT and use GPT-3.5 features for free.

a. To sign up, you will be required to enter your email ID and password. You will receive an automated verification email. After you click verification, you will need to enter your personal details and follow the steps to complete the sign up on your first login.

b. After sign up, you will reach the login page, as shown below.

3. After login, you will view the OpenAI chatbot platform, ChatGPT, as shown below.

ChatGPT

Come up with concepts	**Design a database schema**
for a retro-style arcade game	for an online merch store
Compare design principles	**Create a personal webpage for me**
for mobile apps and desktop software	after asking me three questions

Send a message

Free Research Preview. ChatGPT may produce inaccurate information about people, places, or facts. ChatGPT August 3 Version
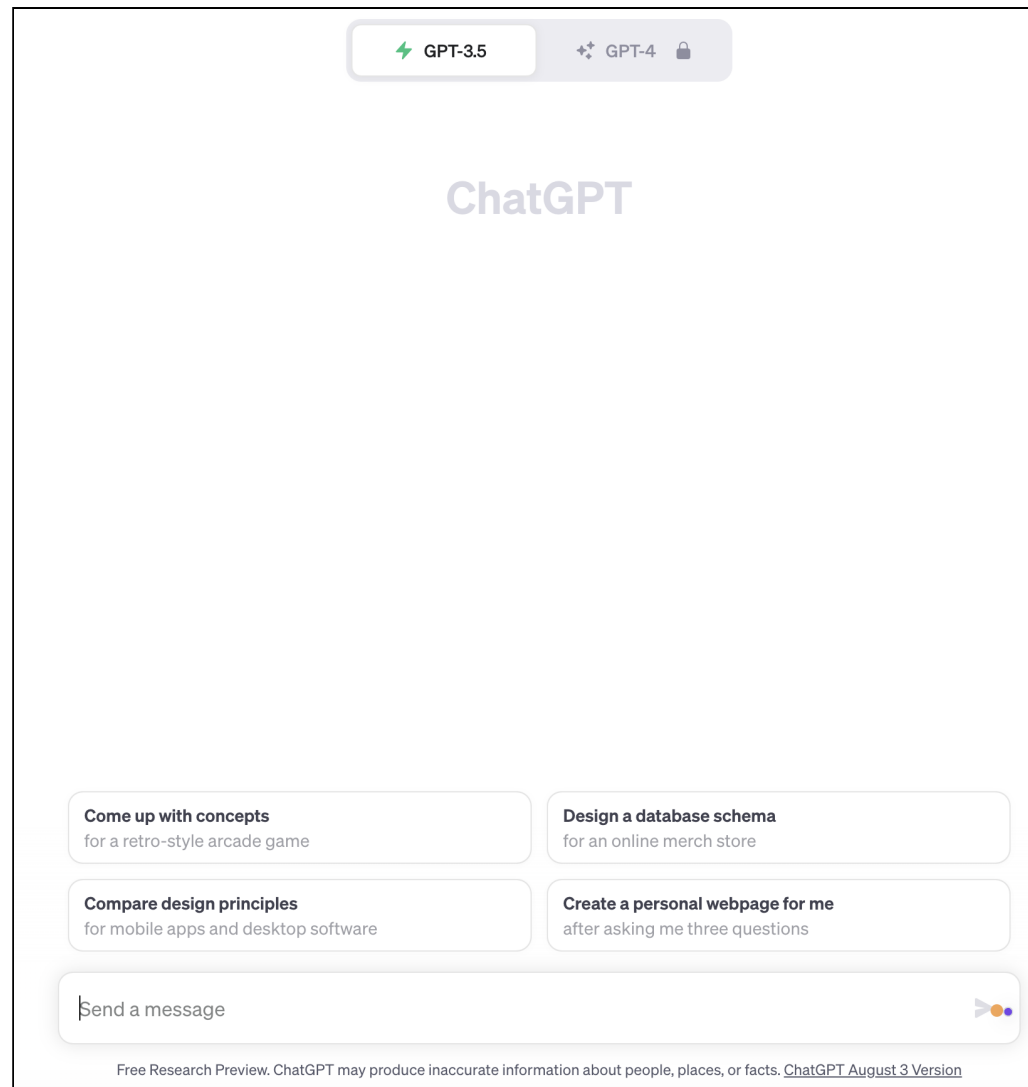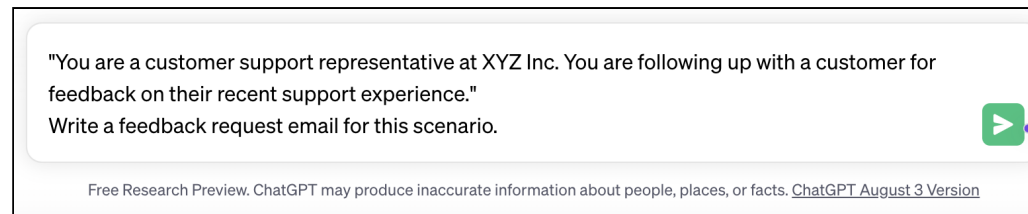
Step 2: Generate the email using a prompt

1. Consider a context for your desired email requirement.

2. Write the prompt or statement in the **send a message** field at the bottom of the ChatGPT screen.
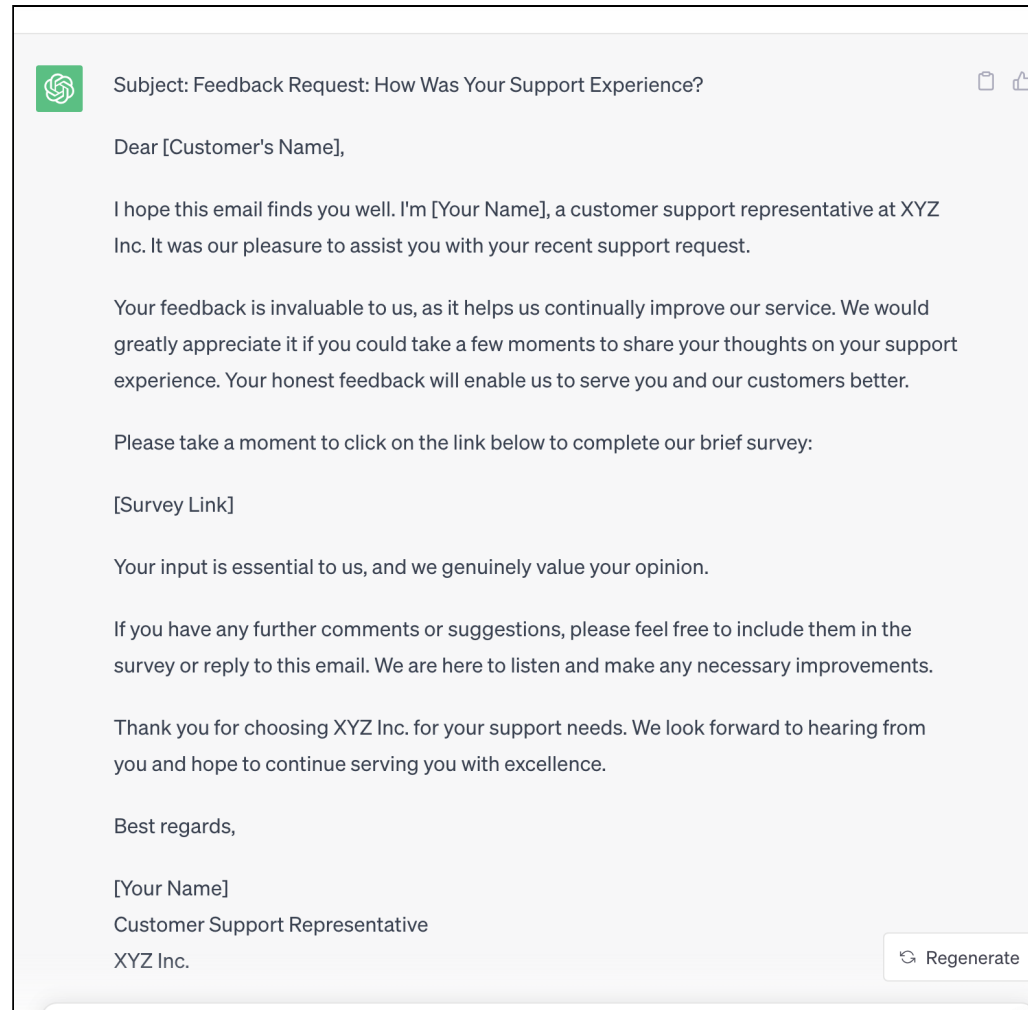   For example,

"You are a customer support representative at XYZ Inc. You are following up with a customer for feedback on their recent support experience." Write a feedback request email for this scenario.

Note: For better results, include specific details about the subject and context of the required email.

> "You are a customer support representative at XYZ Inc. You are following up with a customer for feedback on their recent support experience."
>
> Write a feedback request email for this scenario.
>
> Free Research Preview. ChatGPT may produce inaccurate information about people, places, or facts. ChatGPT August 3 Version

3. Now, click the arrow sign or press the enter key to send the message to the chatbot.

4. You will receive the textual response from ChatGPT for the desired scenario, as shown below.

Subject: Feedback Request: How Was Your Support Experience?

Dear [Customer's Name],

I hope this email finds you well. I'm [Your Name], a customer support representative at XYZ Inc. It was our pleasure to assist you with your recent support request.

Your feedback is invaluable to us, as it helps us continually improve our service. We would greatly appreciate it if you could take a few moments to share your thoughts on your support experience. Your honest feedback will enable us to serve you and our customers better.

Please take a moment to click on the link below to complete our brief survey:

[Survey Link]

Your input is essential to us, and we genuinely value your opinion.

If you have any further comments or suggestions, please feel free to include them in the survey or reply to this email. We are here to listen and make any necessary improvements.

Thank you for choosing XYZ Inc. for your support needs. We look forward to hearing from you and hope to continue serving you with excellence.

Best regards,

[Your Name]
Customer Support Representative
XYZ Inc.

↻ Regenerate

5. You can validate the content per the context, copy the generated email, and update the details as required.

6. If you are unsatisfied with the response, click **regenerate**, and ChatGPT will generate a revised response for the recent prompt.
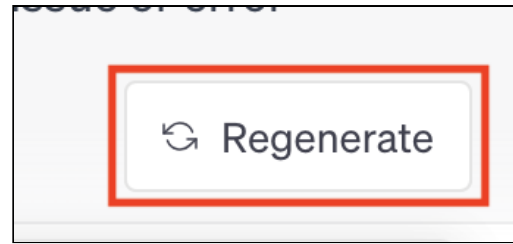
7. You can copy-paste the generated output and tweak it further as required.

Note: You can continue to interact with the ChatGPT to dive deeper and further as long as you like or require.

Step 3: Try yourself

Now, you must try generating emails for different scenarios using ChatGPT to explore the text generation capabilities of generative AI models and tools.

For example,

1. Email your professor to request for a meeting
2. Write an email to follow up on a job application
3. Send out an internal invitation to all your employees for a company event
4. Email your team reminding them about delays on a regular project update
5. Email your customers announcing your new product launch

Note: You must validate the responses generated through ChatGPT for factual accuracy and use the technology ethically and responsibly.

Exercise 2: Convert a unit measurement using ChatGPT

Testing ChatGPT's computational abilities are essential for practicality, education, problem-solving, convenience, versatility, proof of concept, and user engagement. It ensures the AI can effectively perform tasks like math, unit conversion, and problem-solving, making it more valuable in real-world applications and building user trust.
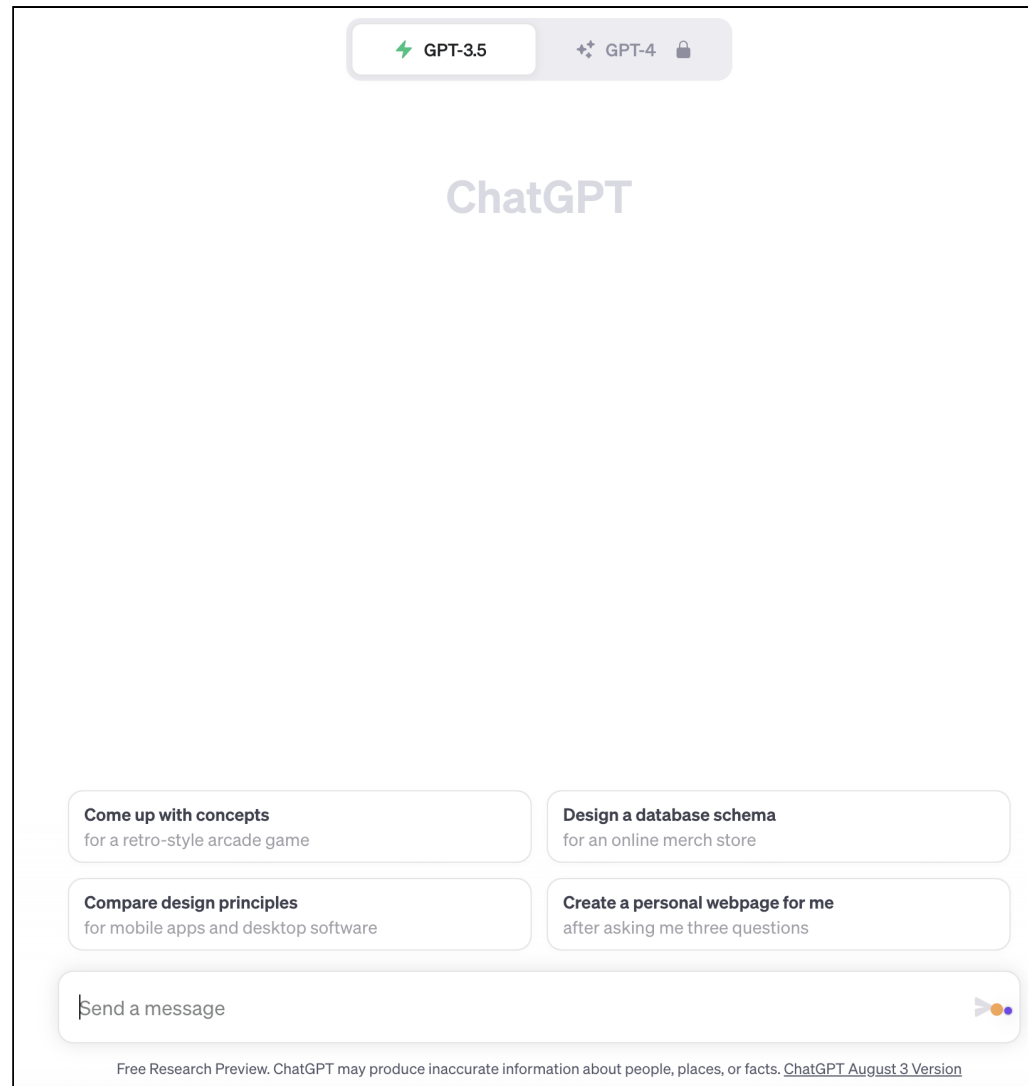
Step 1: Log in steps and the home page

1. Click ChatGPT to launch it.
   Note: If you cannot access ChatGPT by clicking on the link, copy the URL `https://chat.openai.com/` and paste it into a browser.

2. Since you are already logged in, you can view the homepage of OpenAI's chatbot platform, ChatGPT, as shown below.

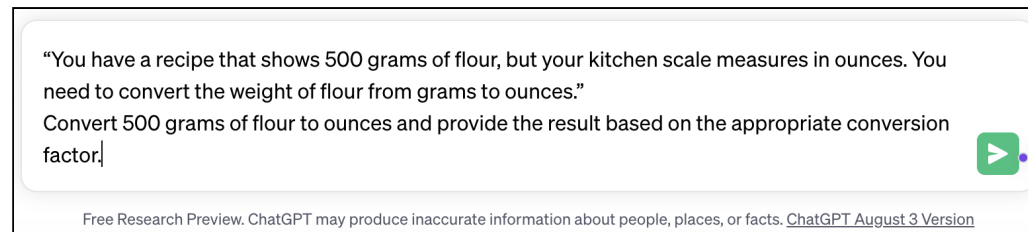## Step 2: Convert the unit measurement

1. Consider a context to convert one unit measurement into another.

2. Write the prompt or statement in the **send a message** field at the bottom of the ChatGPT screen.
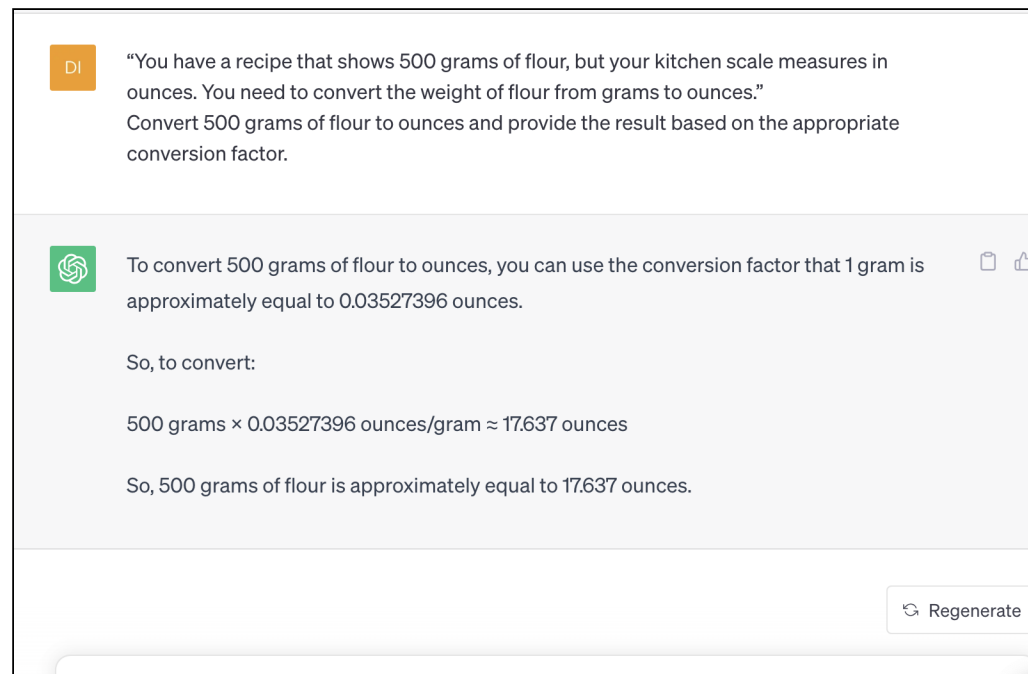For example,
```
"You have a recipe that shows 500 grams of flour, but your kitchen scale measures in ounces. You need to convert the weight of
flour from grams to ounces." Convert 500 grams to ounces and provide the result based on the appropriate conversion factor.
```

Note: For better results, include specific details about the subject and context of the required computation.

> "You have a recipe that shows 500 grams of flour, but your kitchen scale measures in ounces. You need to convert the weight of flour from grams to ounces."
> Convert 500 grams of flour to ounces and provide the result based on the appropriate conversion factor.
>
> Free Research Preview. ChatGPT may produce inaccurate information about people, places, or facts. ChatGPT August 3 Version

3. Now, click the arrow sign or press the enter key to send the message to the chatbot.

4. You will receive the textual response from ChatGPT for the desired scenario, as shown below.

> DI   "You have a recipe that shows 500 grams of flour, but your kitchen scale measures in ounces. You need to convert the weight of flour from grams to ounces."
> Convert 500 grams of flour to ounces and provide the result based on the appropriate conversion factor.
>
> To convert 500 grams of flour to ounces, you can use the conversion factor that 1 gram is approximately equal to 0.03527396 ounces.
>
> So, to convert:
>
> 500 grams × 0.03527396 ounces/gram ≈ 17.637 ounces
>
> So, 500 grams of flour is approximately equal to 17.637 ounces.
>
> ↻ Regenerate

5. You can validate the content per the context, copy the generated response, and use the details as required.

6. If you are unsatisfied with the response, click **regenerate**, and ChatGPT will generate a revised response for the recent prompt.
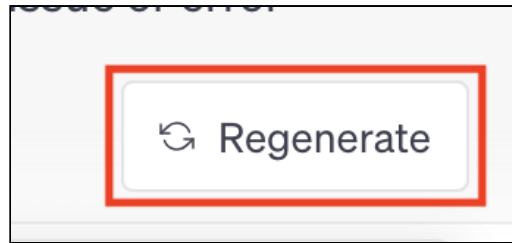
7. You can copy-paste the generated output and tweak it further as required

   Note: You can continue to interact with the ChatGPT to dive deeper and further as long as you like or require.

Step 3: Try yourself

Now, you must try different prompts to test the computational capabilities of ChatGPT for different scenarios.
For example,

1. Find the area of a triangle
2. Calculate the average of five random numbers
3. Compute the simple interest for a principal amount and rate of interest

   Note: You must validate the responses generated through ChatGPT for factual accuracy and use the technology ethically and responsibly.

[Optional] Exercise: Summarize text using Google's Bard

   Bard may not be available in all countries, so this exercise is optional.

Summarization is vital to drawing meaningful and crisp information from long textual components. This helps focus on the relevant parts and eliminate irrelevant or less important text. Writing a summary of long paragraphs or documents can be a time-consuming process. Based on NLP algorithms, generative AI's LLMs simplify text summarization for you. It speeds up the text summarization of long texts and documents and includes key points and context from the source text.

In this exercise, you will examine the text summarization capability of generative AI using Bard.

What is Bard?

Bard is a conversational generative AI service that generates various text formats. It is a collaboration tool that harnesses the power of the web. Powered by Google's advanced language models, PaLM, short for Pathways Language Model, pulls information from knowledge across the internet to respond to prompts.

Step 1: Log in steps and the home page

1. Click Bard to launch it.
   Note: If you cannot access Bard by clicking on the link, copy the following URL and paste it into a browser.

1. 1

1. `https://bard.google.com/chat`

Copied!

2. Once launched, you must sign up or login.

   Note: You can use your existing Gmail account or create a free account on Bard.
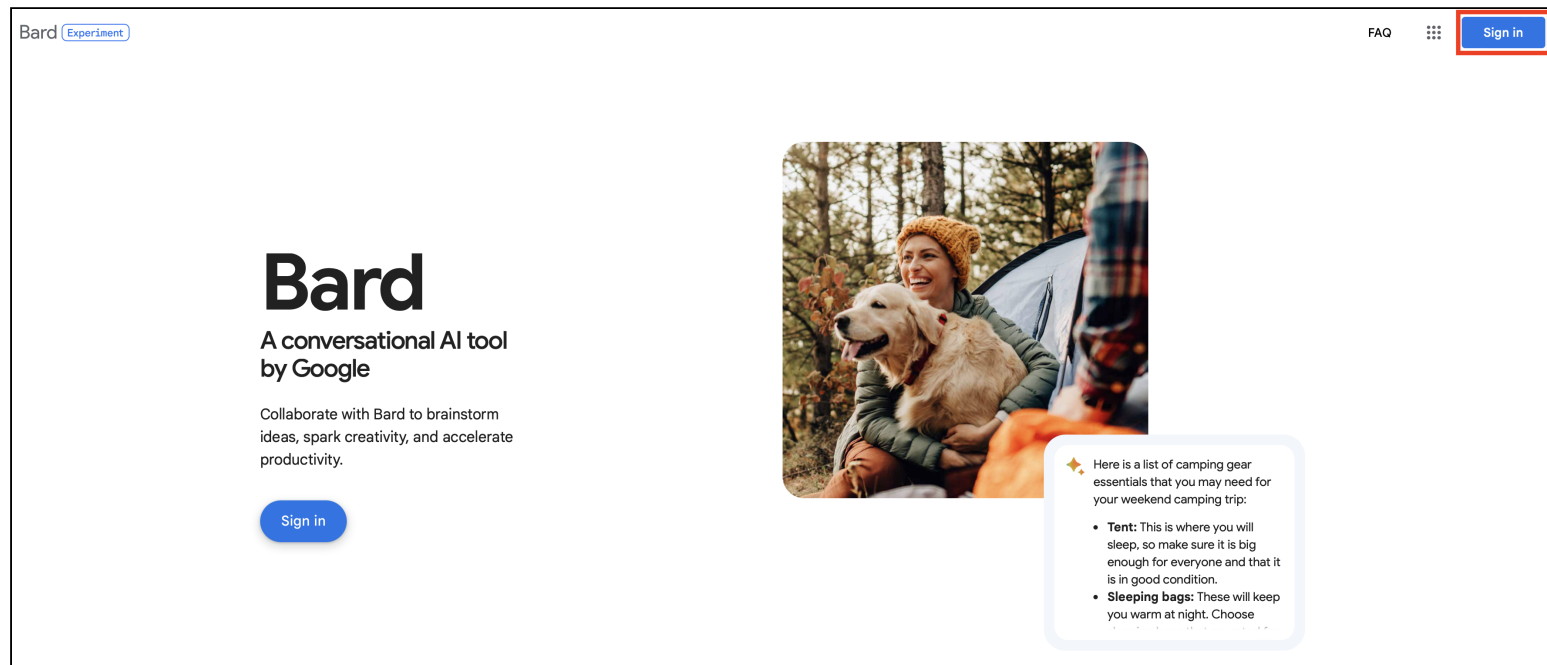
a. To sign up, you must enter your Gmail ID and password. You will receive an automated email confirming your Bard account.

b. After signing up or log in, you will reach the home page, as shown below.
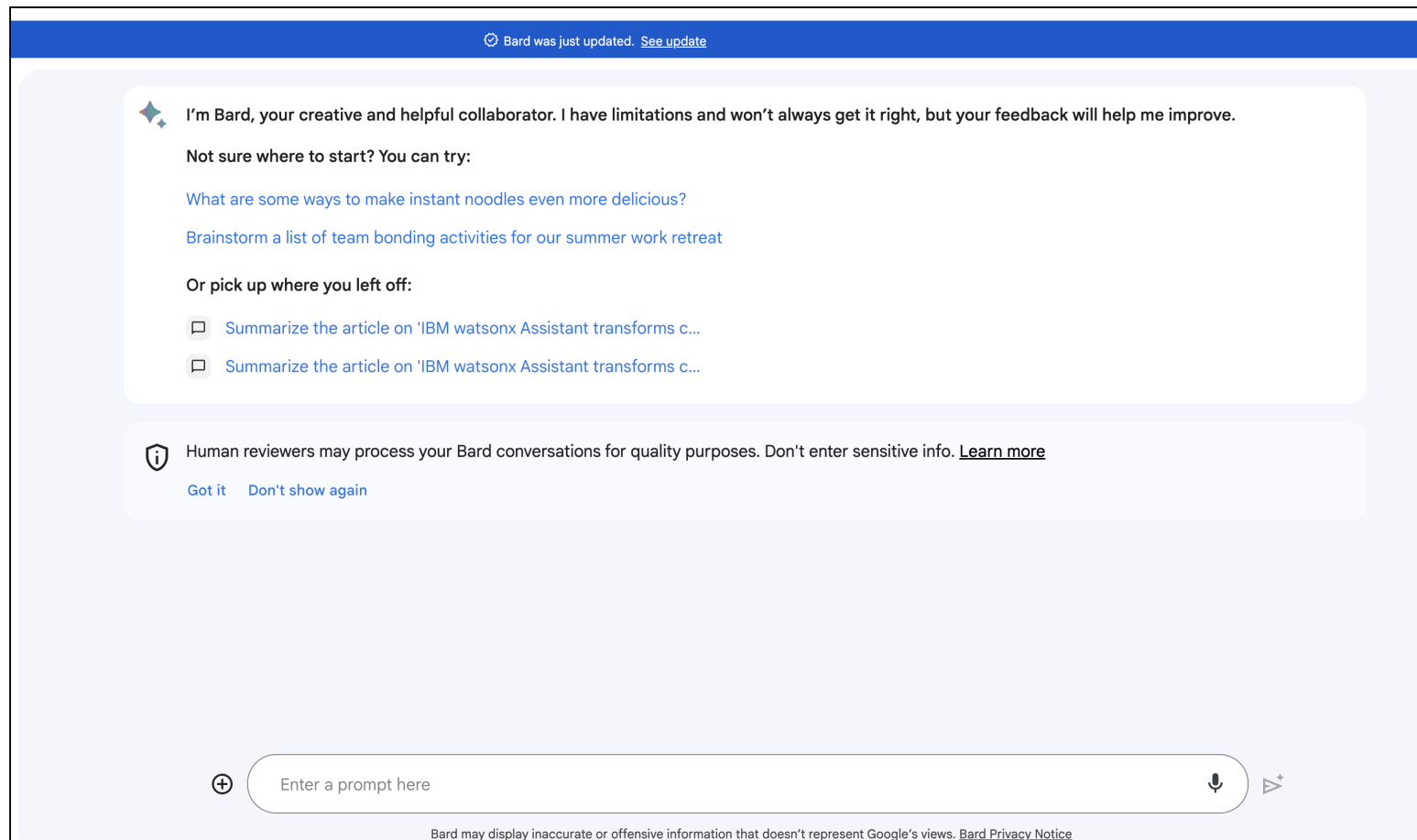
Step 2: Summarize the text using Bard

1. Consider a scenario or context for the desired text summarization requirement.

2. Write the prompt or statement in the **Enter a prompt here** field at the bottom of the screen.
   For example,
   "Summarize the article on 'IBM watsonx Assistant transforms content into conversational answers with generative AI' based on

```
the IBM blog post (https://www.ibm.com/blog/ibm-watsonx-assistant-transforms-content-into-conversational-answers-with-
generative-ai/) into a small paragraph."
```

Note: For better results, include specific details about the subject and context of the required text.
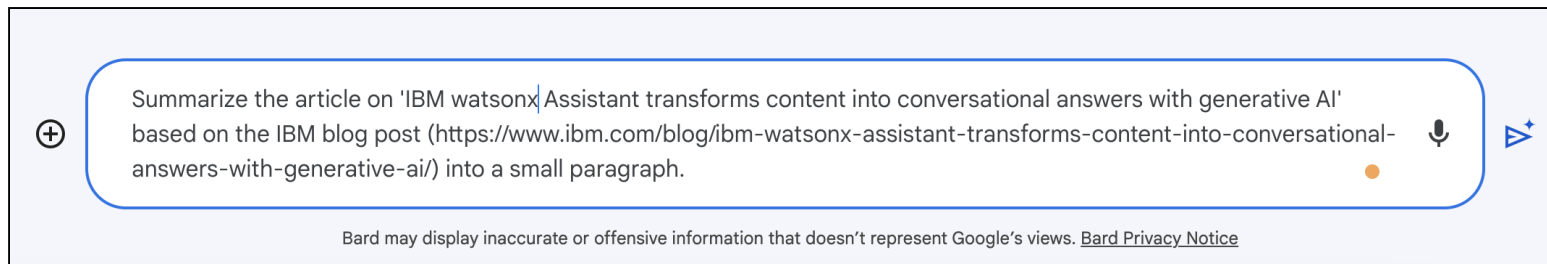
3. Now, click the arrow sign or press the enter key to send the message to the chatbot.

4. You will receive the textual response from Bard for the desired article or text summarization prompt, similar to the screenshot shown below.

5. Bard generates additional drafts for your prompt. You can review all drafts and select the best result for your requirements, similar to the screenshot shown below.
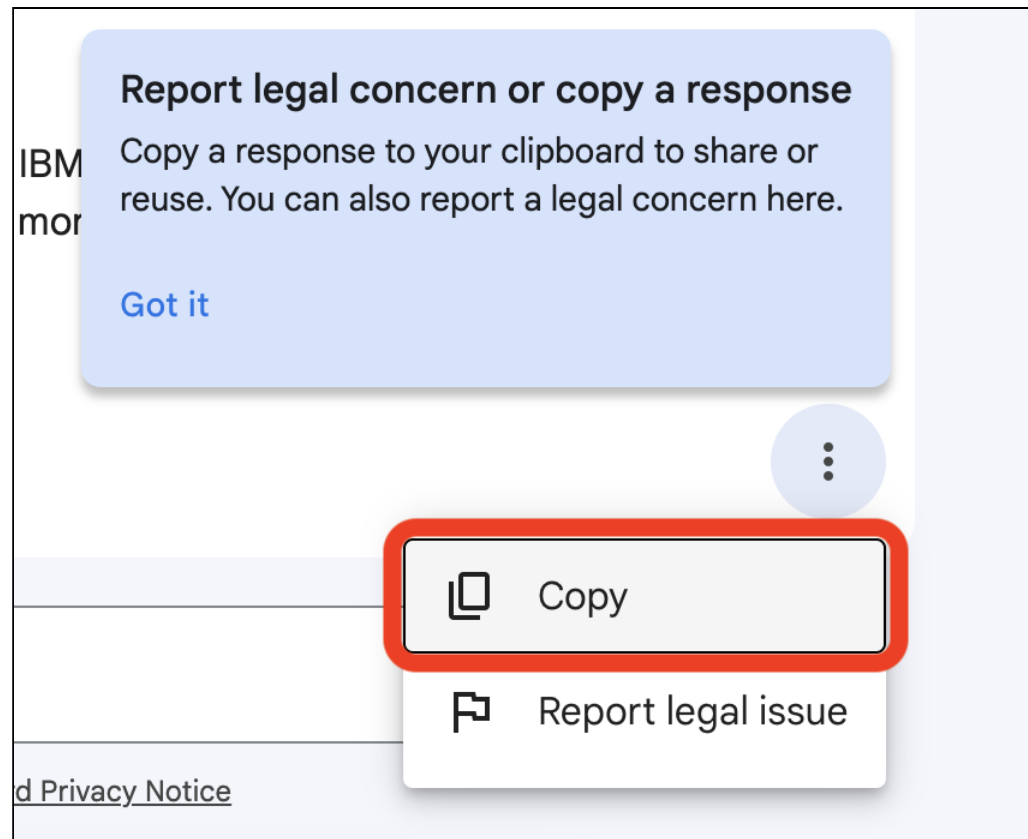

6. If you are unsatisfied with the response, click **regenerate drafts**, and Bard will share revised draft responses for your original prompt.
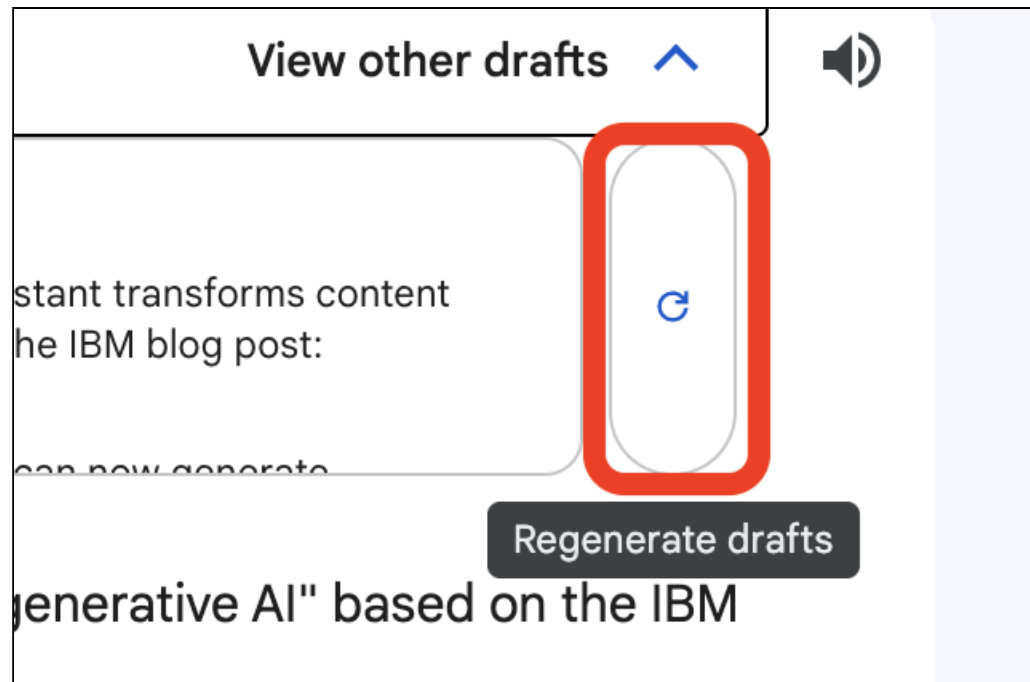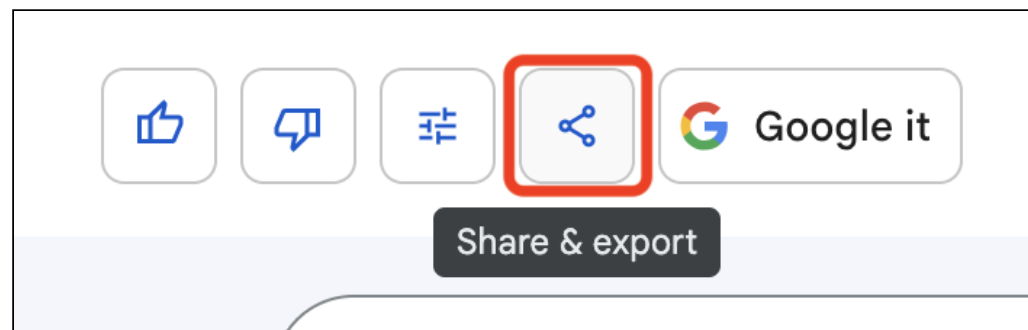
7. You can use the generated output and tweak it further.

a. You can copy the generated text to share or reuse, as shown in the screenshot below.
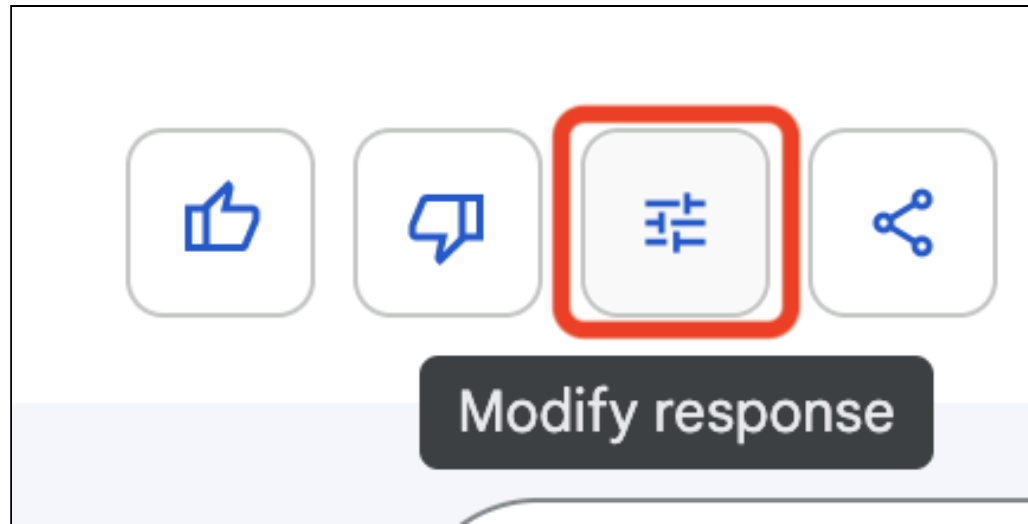
b. You can directly share or export the Bard response, as shown in the screenshot below.

c. You can modify the generated text to tweak it as necessary, as shown in the screenshot below.

8. You must validate the content per context and use the generated text summary as required.

   Note: You must validate the responses generated through Bard for factual accuracy and use the technology ethically and responsibly.

Step 3: Try yourself

Using Bard, you must try text summarization for different types of content: articles, blogs, research papers, or research reports.

Summary:

Congratulations! You just completed the hands-on lab text generation in action.

In this lab, you explored the text generation capabilities of generative AI using LLMs. You learned how to write an email using ChatGPT's assistance. You explored the computational abilities of generative AI's language model by converting the unit measurement. You also learned how to summarize text using Bard for a given article or document.

Changelog

Date	Version	Changed by	Change Description
2023-08-16	0.1	Divya Pareek	Initial version created

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