

# Hands-on Lab: Image Generation in Action with Microsoft Copilot and Microsoft Designer(Optional)

**Estimated time:** 45 minutes

Welcome to the hands-on lab image generation in action with Microsoft Copilot and Microsoft Designer.

## What are AI image generation tools?

AI image generation tools are programs that use advanced technology to create or improve images without human intervention. These tools can create lifelike images, improve blurry pictures, remove unwanted elements, and create images based on written descriptions. Popular AI image generation tools like Microsoft Copilot, DALL-E, and StyleGAN are widely used in art, design, and research to make image-making process easier and create exceptional visuals.

This lab focuses on generative AI's image-generation capabilities. You will examine and explore the Microsoft Copilot/Microsoft Designer and use it to generate image captions and create thumbnails from textual descriptions.

## Learning Objectives

After completing this lab, you will be able to:

- Explore the image-generation capabilities of generative AI using Microsoft Copilot and Microsoft Designer
- Generate an image caption using Microsoft Copilot
- Create thumbnail images representing larger images using Microsoft Copilot
- Generate an social media post using Microsoft Designer

**Note:** These exercises are optional, as using the Microsoft Copilot/Designer requires signing in with your email account.

## Exercise 1: Generate image caption using Microsoft Copilot

In the digital age, image captions have gained even more importance due to their role in improving accessibility for people with visual impairments. Screen readers and other assistive technologies can read these captions aloud, allowing individuals who cannot see the image to understand its content. Generative AI models simplify the task of predicting the captions for the given image.

In this exercise, you will generate the caption for an image using GPT- powered Microsoft Copilot.

### What is Microsoft Copilot?

Microsoft Copilot is an LLM-based (large language model) chatbot developed by Microsoft. It can cite sources, create poems, and write songs.

Copilot uses generative AI technology (Microsoft Prometheus model) built upon OpenAI's GPT-4 foundational large language model, which has been fine-tuned using supervised and reinforcement learning techniques. Copilot's conversational interface style resembles ChatGPT's. The chatbot can communicate using numerous languages and dialects.

The free version of Microsoft Copilot includes the standard Copilot chatbot.

Microsoft Copilot is oriented toward generating images from your ideas that enhance your design or even create clever caption and hashtag options.

Let's generate captivating captions for the images using Microsoft Copilot's GPT model.

### Step 1: Select the image for caption generation

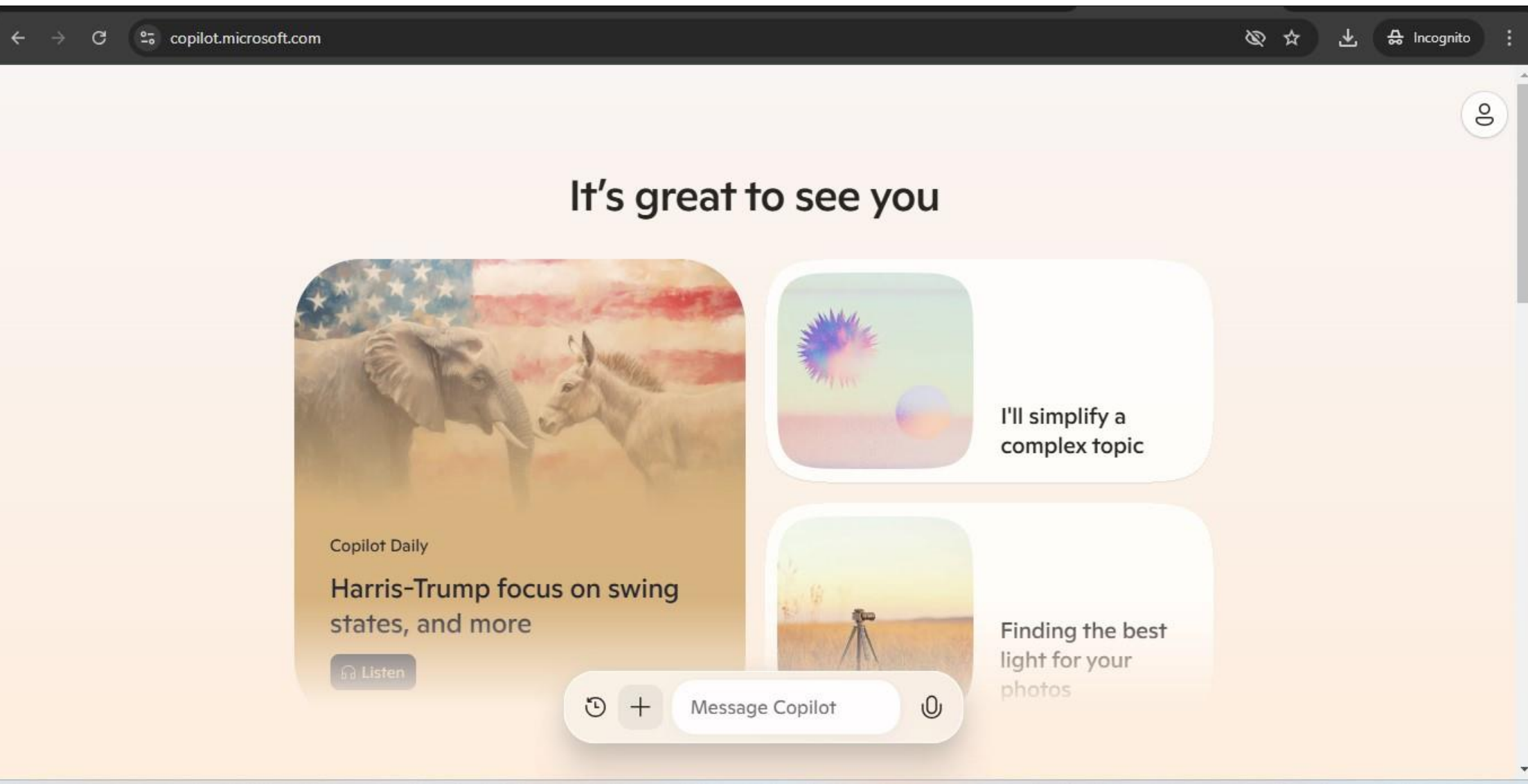
Select the image for which you want to generate the caption.

### Step 2: Launch Microsoft Copilot

1. Click [Microsoft Copilot](https://copilot.microsoft.com/) to launch it.

Note: If you cannot access Microsoft Copilot by clicking the link, copy the following URL and paste it into a browser.

<https://copilot.microsoft.com/>



### Step 3: Sign in/Sign up and launch Microsoft Copilot

Note: Signing up or signing in is not mandatory when using Microsoft Copilot. However, it is recommended that you sign up or sign in with your Microsoft account to ask multiple questions and have longer conversations with the chatbot. Using Microsoft Copilot, you can generate unlimited images for free. You will just require a Microsoft account, which is free to set up.

1. Select **Sign in** at the top of the page.

Sign in 



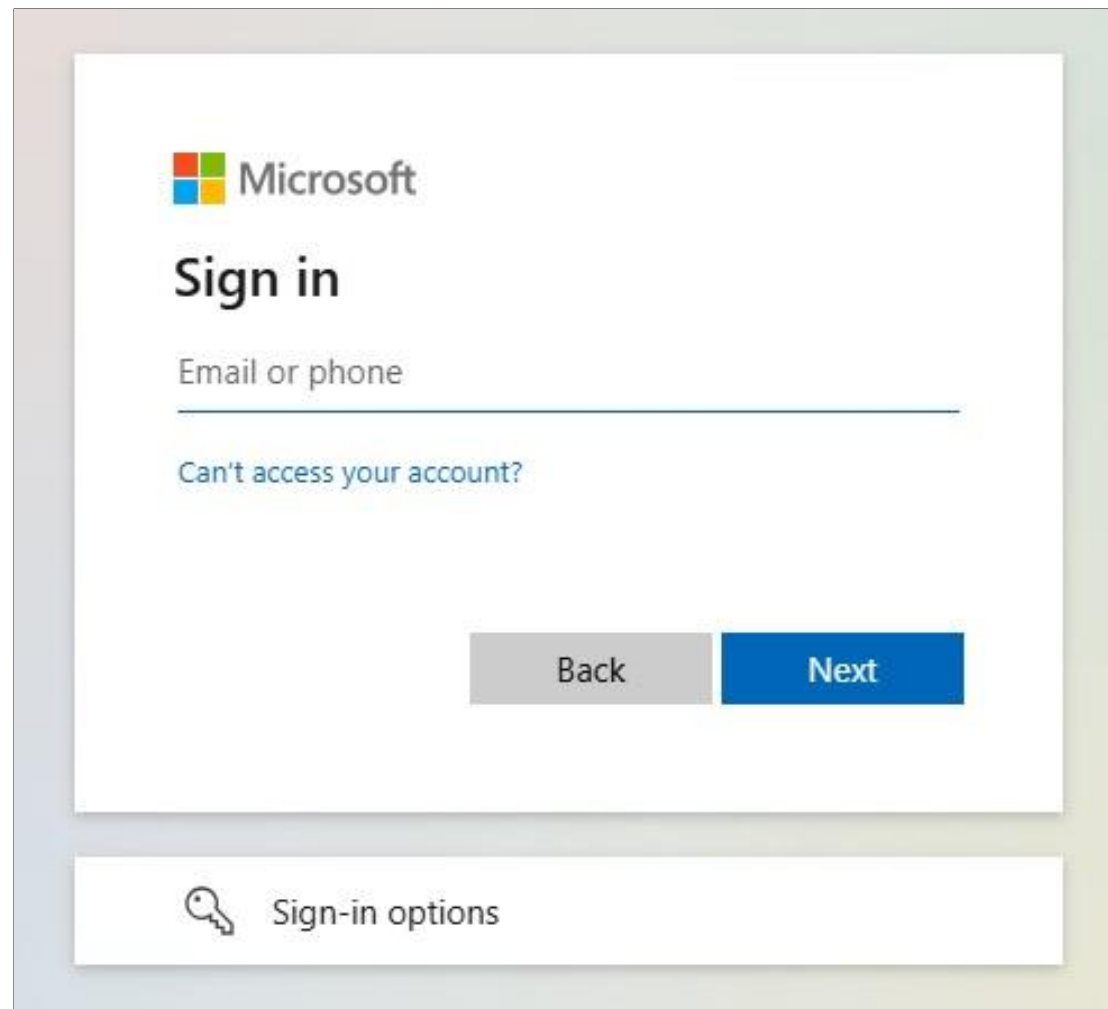
Create an account or sign in to  
keep all your conversations and to  
generate images

Sign in

n game

Name

2. If you have an email associated with Microsoft, you can sign in directly using that email.



The image shows a Microsoft sign-in dialog box. At the top left is the Microsoft logo. Below it is the text "Sign in". Underneath is a text input field labeled "Email or phone". Below the input field is a link that says "Can't access your account?". At the bottom right are two buttons: "Back" and "Next". At the bottom left is a key icon and the text "Sign-in options".


Microsoft

Sign in

Email or phone

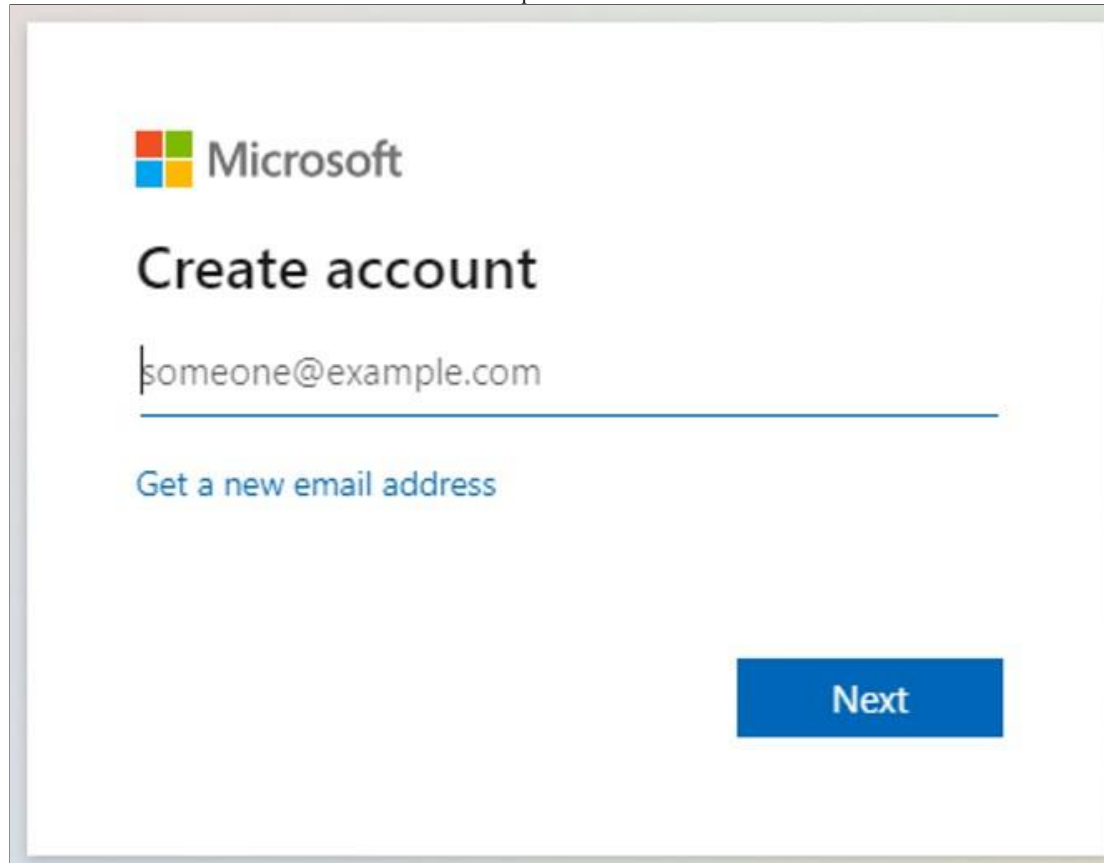
[Can't access your account?](#)

Back Next

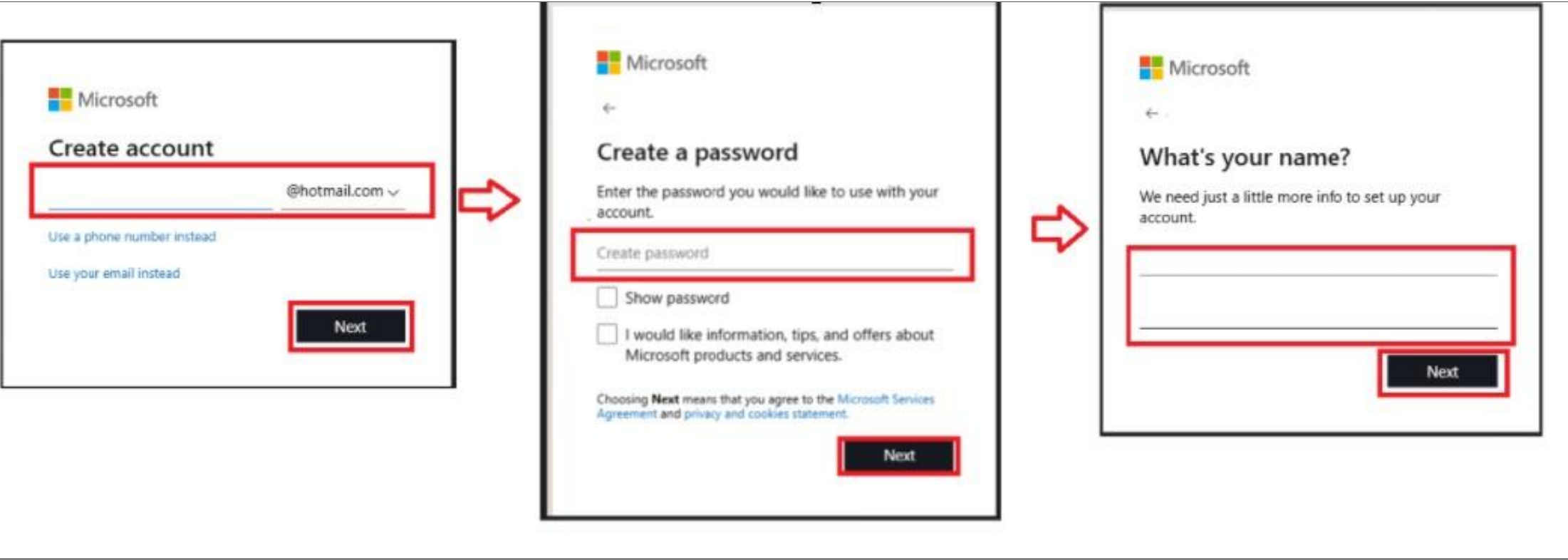
 Sign-in options

Note: After clicking Next, you may receive an authentication code in your email, which you must enter when signing in.

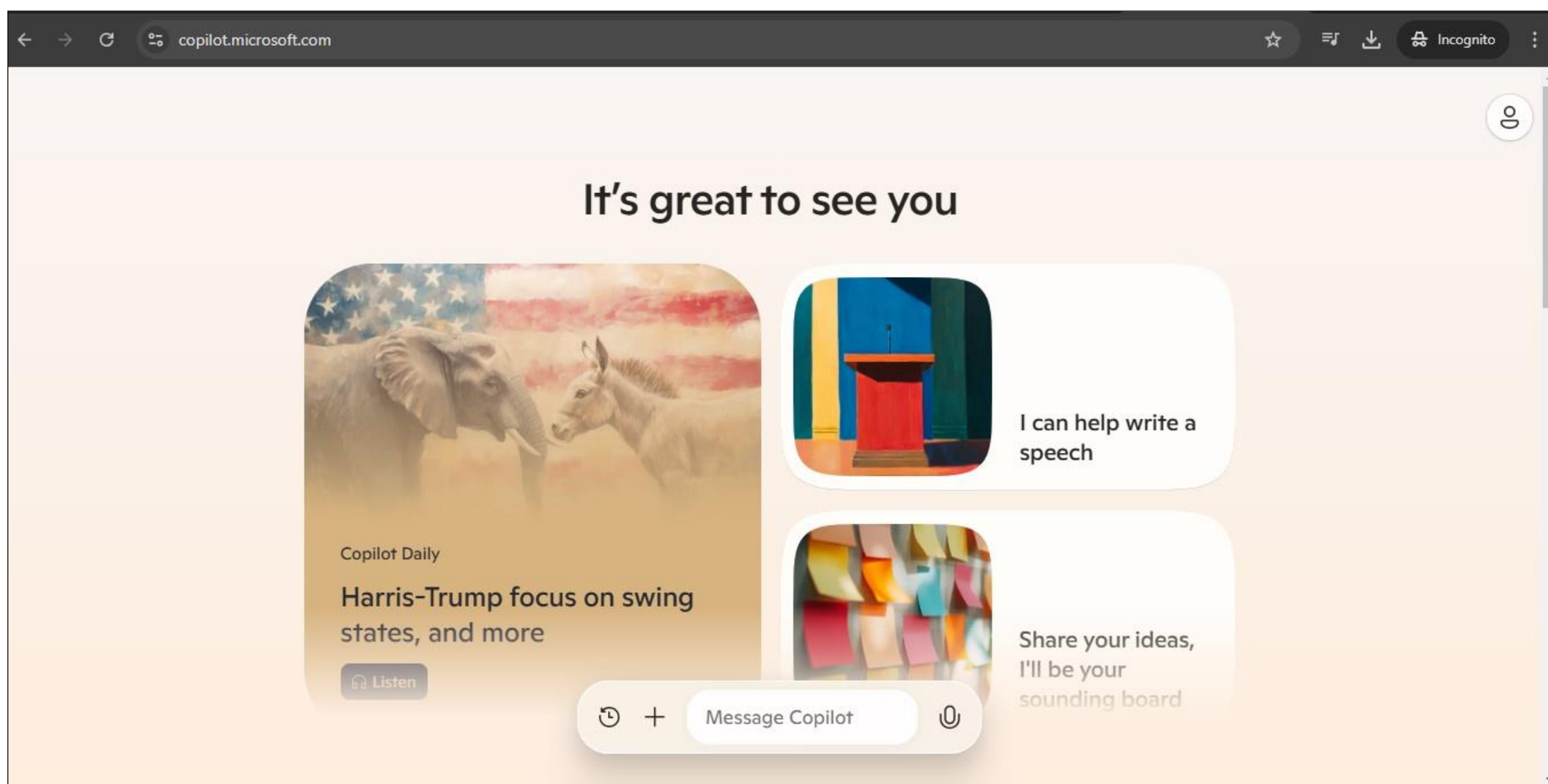
3. If you do not have an email account, then you can select `Create one!` and then select `Get a new email address` to set up a new account.

A screenshot of the Microsoft account creation interface. At the top left is the Microsoft logo. Below it, the text "Create account" is displayed in a large, bold font. Underneath, there is a text input field containing the placeholder email address "someone@example.com". Below the input field is a blue link that says "Get a new email address". In the bottom right corner, there is a blue rectangular button with the word "Next" in white text.

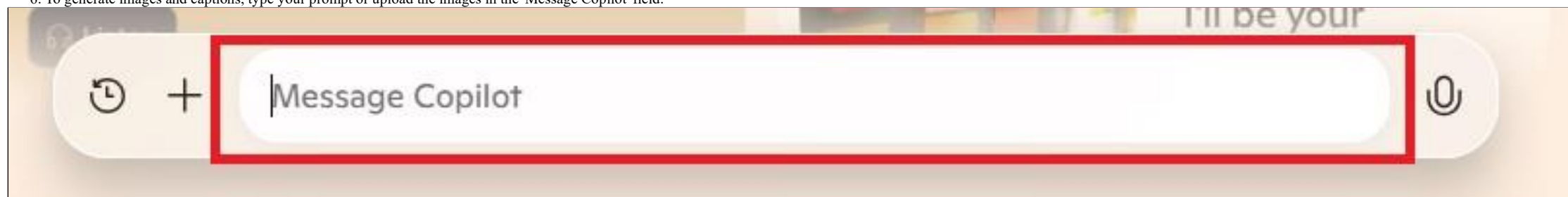
4. Fill in your credentials and follow the steps to create an email. After creating the email, sign in using your credentials to use the Microsoft Copilot platform.



5. After signing in, you may need to answer some onboarding questions like your name and you preferred voice for interaction. Once you complete these steps you will reach the Copilot home page.

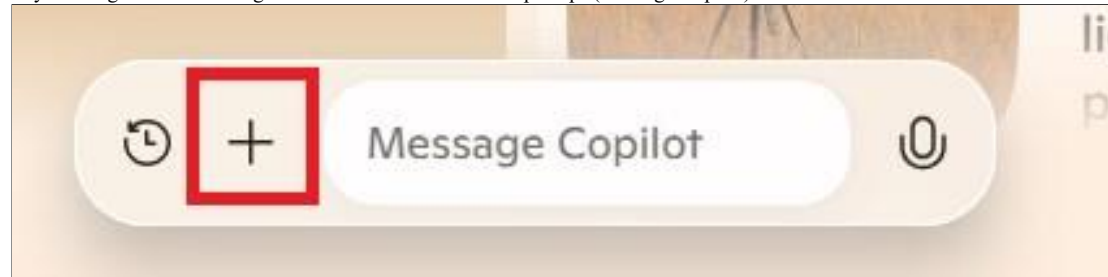


6. To generate images and captions, type your prompt or upload the images in the 'Message Copilot' field.



#### Step 4: Generate the caption for the selected image

1. Insert the image for which you want to generate the caption by clicking the Add an image button on the left side of the prompt (Message Copilot) field.



2. After uploading the image, you will see a small thumbnail of the image below the prompt field. Now, within the prompt field, you can type the message to generate the caption. For example, Generate a caption for this image.



3. Now click the **Submit** button, and the system generates the caption within seconds, as shown in the screenshots below.





Generate a caption for this image.

"Curious kitten reaching out with a playful paw."

Seems like this little furball is on a mission! 😊

4. You can also regenerate the response by simply typing `Regenerate response` in the prompt field.

Regenerate response

"Feline Curiosity: One paw at a time."

This kitten sure has an adventurous spirit! 😊

5. Now, you must try generating captions for three images of your choice using the Microsoft Copilot.



Generate a caption for this image.

"A duck stands by the water's edge, preening its feathers in the sunlight." 🦆 😊

Regenerate the response.

Sure thing!

"Duck daydreaming by the pond, basking in the gentle warmth of the afternoon sun." 🦆



If you have any other images or ideas you'd like me to work on, feel free to share!



Generate a caption for this image.

"Majestic King Vulture displaying its vibrant and intricate plumage."

What a stunning bird! Do you have any other images to share, or is there another topic you'd like to explore? 🦋 🌈



"Delicate moth perched on a finger, showcasing its intricate wings and vibrant colors."

Incredible capture! Do you have more photos or perhaps another topic you'd like to

## Exercise 2: Create small thumbnail images representing larger images using Microsoft Copilot

Thumbnails are small images that provide a preview of larger content, such as videos, images, or documents. This visual preview improves navigation, enhances the user experience, aids content organization, and contributes to marketing efforts across various digital platforms.

In this exercise, you will use the Microsoft Copilot to create a small thumbnail image representing a larger image.

Let's generate a thumbnail representing the images or videos using the Microsoft Copilot Image Creator tool.

### Step 1: Sign in/Sign up and launch Microsoft Copilot

To sign in/sign up and launch Microsoft Copilot , follow steps 2 and 3 in Exercise 1: Generate image caption using Microsoft Copilot.

### Step 2: Exercise the thumbnail generation

1. To create the thumbnail for your video, type the prompt in the prompt field.  
For example,

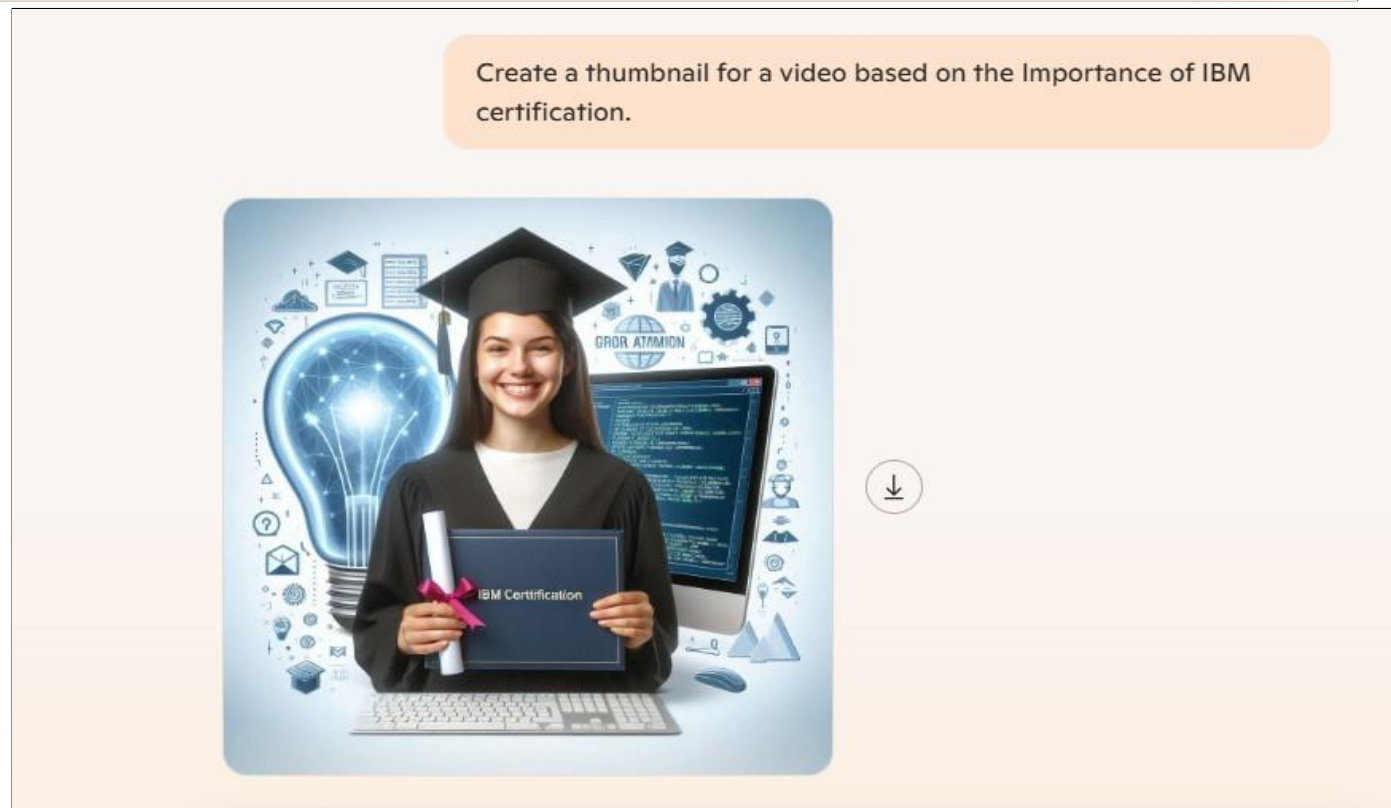
Create a thumbnail for a video based on the Importance of IBM certification.

+

Create a thumbnail for a video based on the Importance of IBM certification.

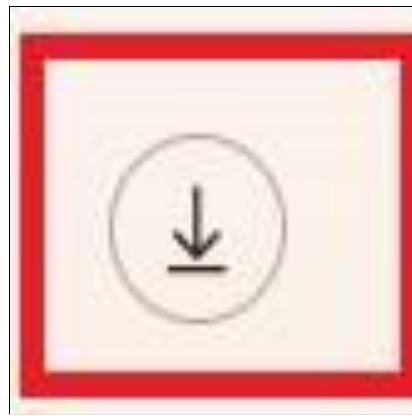
↑

2. Now, click **Submit**, and you will get the output.



3. Use the **Download** option to download the image.

4. Now, you must try generating three thumbnails using Microsoft Copilot.



### Exercise 3: Generate social media post using Microsoft Designer

A social media post is any content shared on various social media platforms like Facebook, Instagram, or Twitter, designed to engage, inform, or entertain an audience. It plays a key role in building connections, sharing updates, and influencing conversations. Generative AI streamlines the creation of visually appealing posts, such as social media posters, by automating design elements, crafting engaging captions, and personalizing content, making the entire process faster, more efficient, and tailored to audience preferences.

In this exercise, you will generate a social media post using Microsoft Designer.

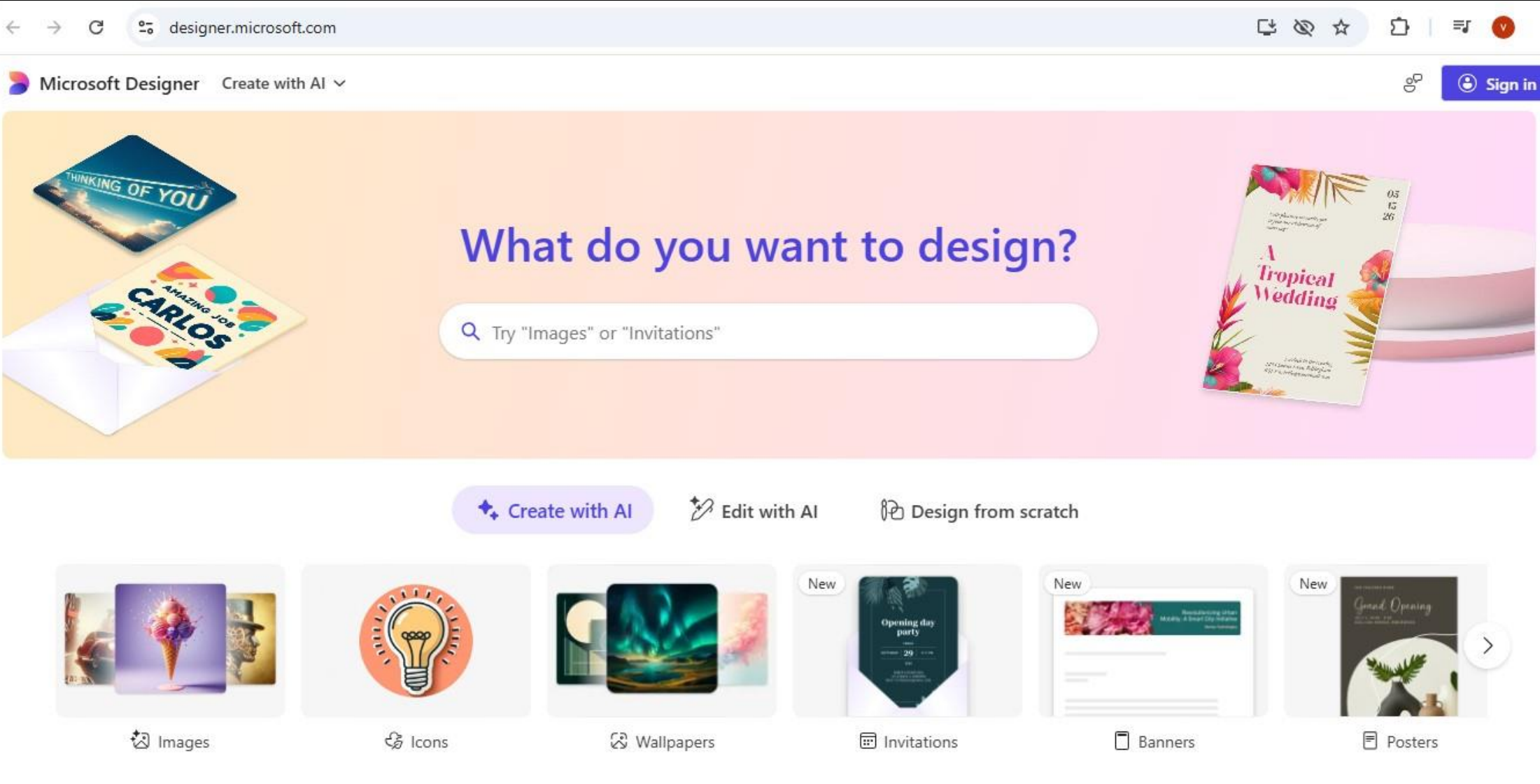
#### What is Microsoft Designer ?

Microsoft Designer is an AI-powered graphic design tool developed by Microsoft, aimed at simplifying the process of creating professional-quality designs for both personal and business use. It is part of the Microsoft 365 suite of tools and leverages advanced artificial intelligence, particularly from DALL·E, an image generation model created by OpenAI, to help users design visuals quickly and easily. **Step 1: Launch Microsoft Designer**

1. Click [Microsoft Designer](https://designer.microsoft.com/) to launch it.

Note: If you cannot access Microsoft Designer by clicking the link, copy the following URL and paste it into a browser.

<https://designer.microsoft.com/>



**Step 2: Sign in and launch Microsoft Designer**

To sign in and launch Microsoft Designer , use the same ID used to log in to Microsoft Copilot in Exercise 1 and 2.



### Step 3: Generate the Social Media Posts

1. To generate the social media post for your social account, search for the **Social Posts** option using the arrow key.

The screenshot shows the Microsoft Designer web application interface. At the top, the browser address bar displays "designer.microsoft.com". The page header includes the Microsoft Designer logo, a "Create with AI" dropdown menu, and a "My projects" link. On the right side of the header, there is a blue "Create" button and a user profile icon.

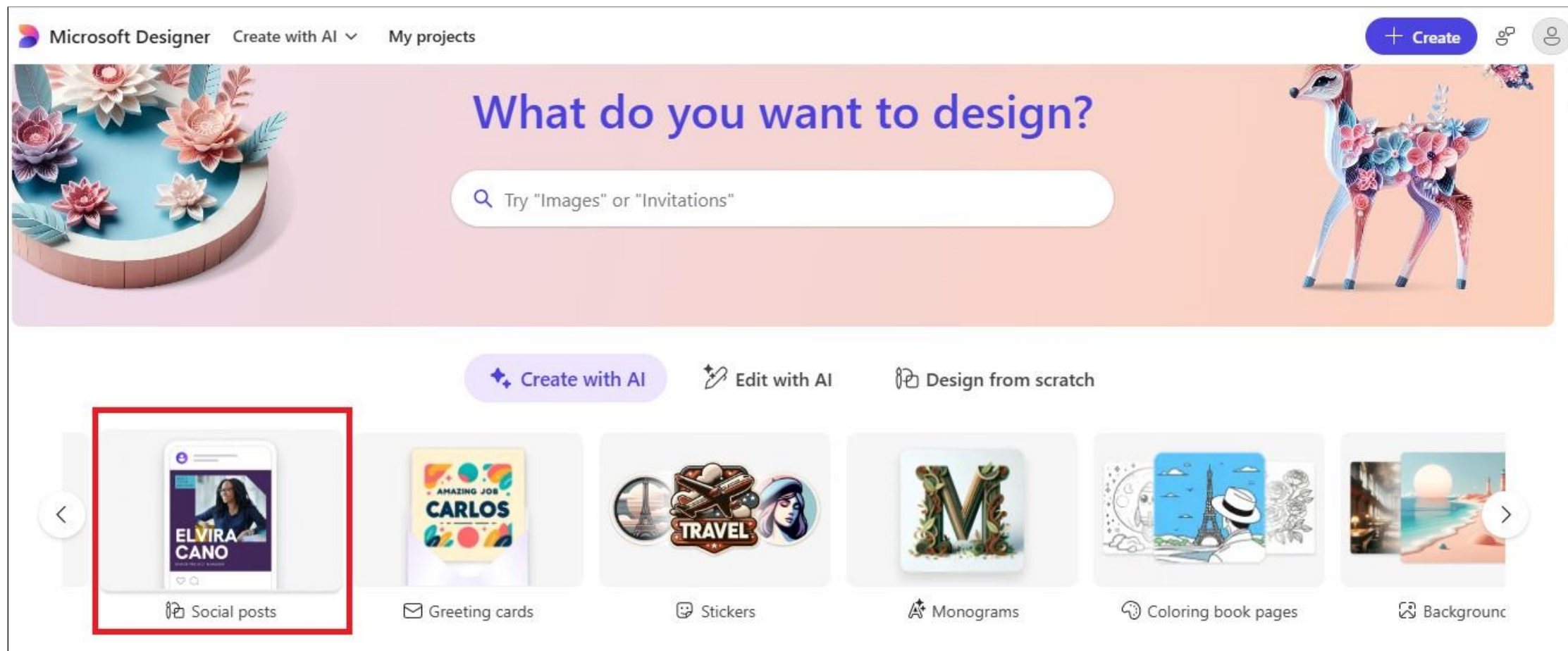
The main content area features a large, light pink background with the text "What do you want to design?" in a bold, purple font. Below this text is a search bar with the placeholder text "Try 'Images' or 'Invitations'". To the left of the search bar is a decorative image of a blue circular base with several colorful, stylized flowers. To the right is a decorative image of a deer with a floral pattern on its body and a butterfly.

Below the main content area, there are three buttons: "Create with AI" (with a star icon), "Edit with AI" (with a pencil icon), and "Design from scratch" (with a document icon).

At the bottom, there is a row of six design category tiles, each with a representative image and a label below it:

- Images**: Shows a collage of three images: a person's face, a colorful explosion, and a top hat.
- Icons**: Shows a lightbulb icon inside a red circle.
- Wallpapers**: Shows a collage of three images: a moon, a green aurora, and a colorful abstract background.
- Invitations**: Shows a "New" badge and a dark green invitation card for an "Opening day party" on "29".
- Banners**: Shows a "New" badge and a banner with a pink floral background and the text "Rebuilding Urban Mobility: A Smart City Initiative".
- Posters**: Shows a "New" badge and a poster with a black background, a white circle, and a plant. A red rectangle highlights a white circular button with a right-pointing arrow (>) in the top right corner of the poster tile.

2. Click on the **Social Posts** icon



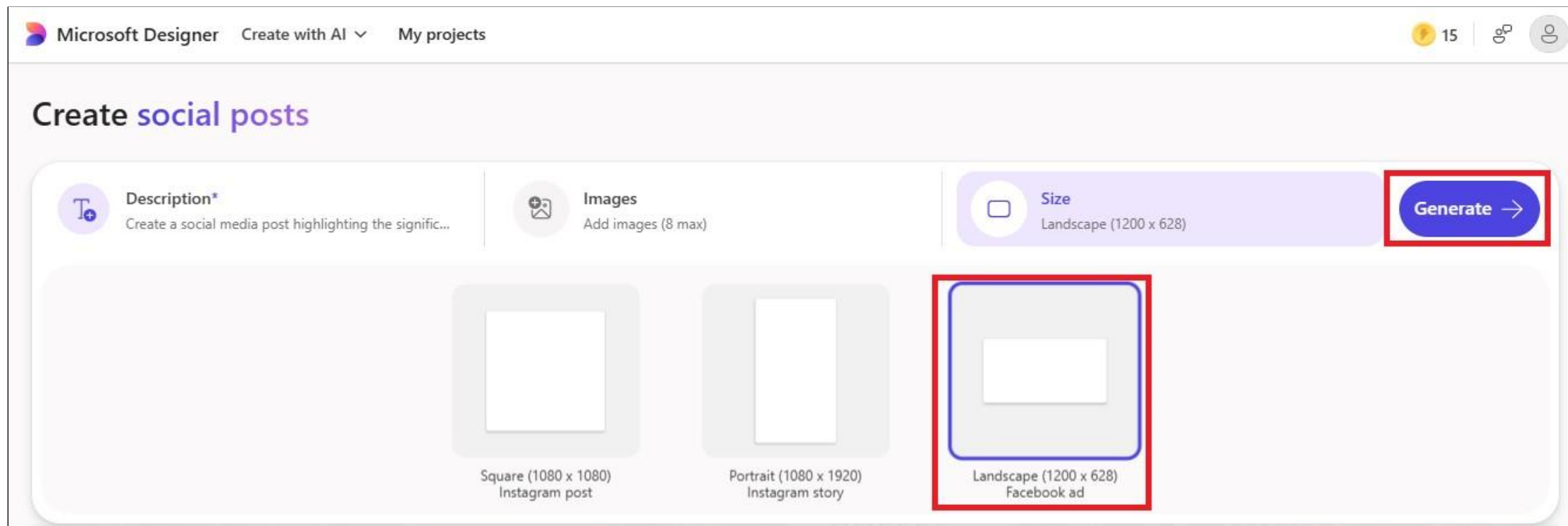
3. To create the social post, type the prompt in the Description field.

For example,

Create a social media post highlighting the significance of IBM certification.



4. Choose the **Size** option. You'll see several size options available. Select **Landscape** and then click **Generate**.



*Note: If you want to create a post using your own images, you can upload them by clicking on the "Images" option.*

5. You will see the output below the input options.



### Description\*

Create a social media post highlighting the signific...



### Images

1 image selected (8 max)



### Size

Landscape (1200 x 628)

Generate →

Explore ideas

My creations

[About](#)



Now, you must try generating three social posts using Microsoft Designer.

## Summary

Congratulations! You just completed the hands-on lab image generation in action with Microsoft Copilot and Microsoft Designer

In this lab, you explored the image-generation capabilities of generative AI. You also learned how to generate captivating captions for images and how to create thumbnail images using Microsoft Copilot and how to generate social media posts using Microsoft Designer.

### Author(s)

Gagandeep Singh

