

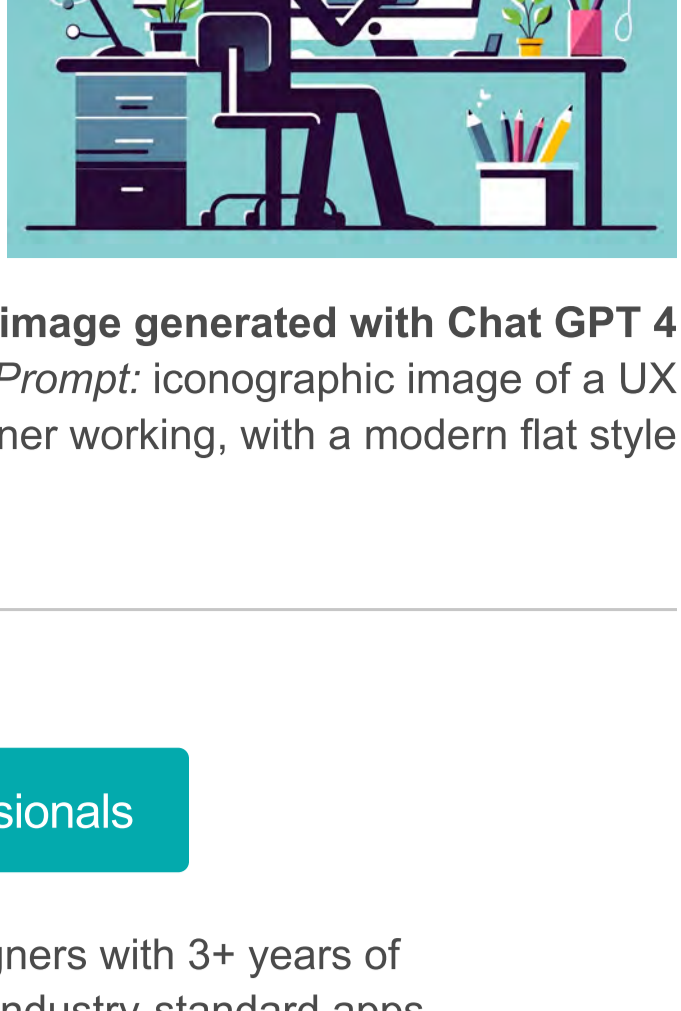
Design: Adobe Photoshop

Our exploration into AI-driven design tools, and ways they can help in our day-to-day

Consumer vs. professional needs

First things first: AI features are capturing the imagination of general consumers and design professionals alike. For this exercise, we sought clarity on whether Adobe's AI capabilities within **Adobe Photoshop** could help us streamline efforts in our Design Studio when faced with common tasks we perform in the course of a design project. These tasks would be considered "professional" in nature and have relevancy to designers who use these tools to make a living.

Consider this a work in progress... a living document that we'll add to in the months ahead, and share our findings with you as we go.



AI image generated with Chat GPT 4
Prompt: iconographic image of a UX designer working, with a modern flat style

What and who is this research for?

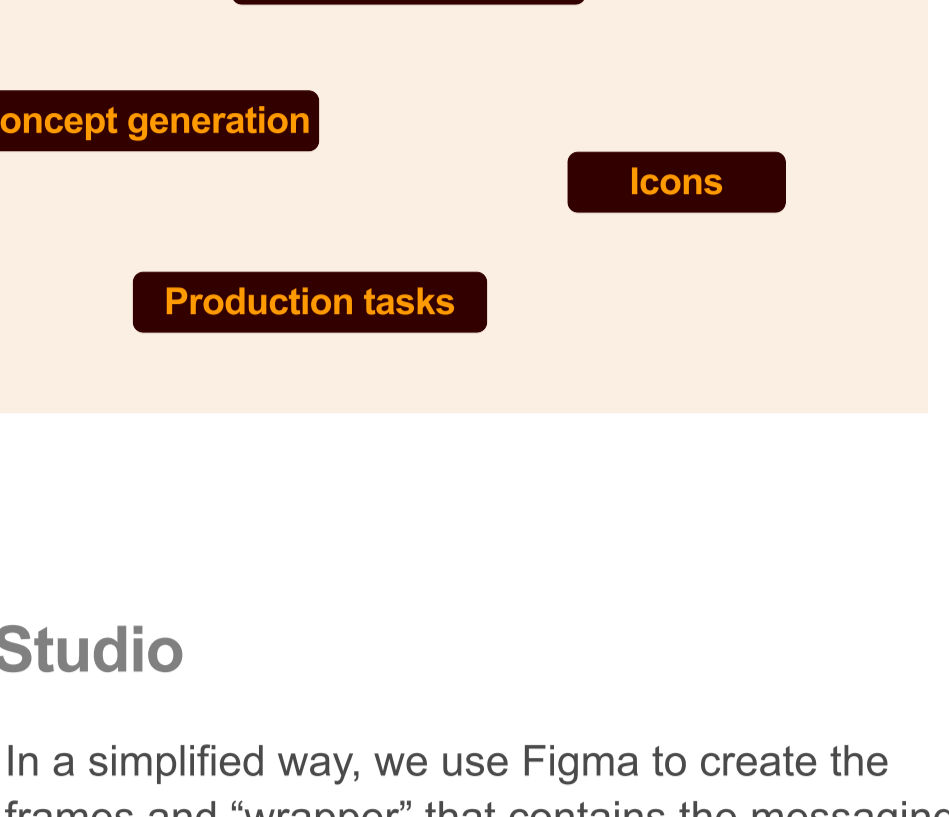
This resource is crafted for design professionals, small-scale product teams, and UI/UX designers.

We set out to learn if AI features within Adobe help us...

- Save time?
- Generate ideas and concepts?
- Provide a head start by providing digital or vector-based art that is simpler to update than starting from scratch?
- And of course... Can AI within Adobe help us edit other AI-based images from other apps?

Design professionals

Professional designers with 3+ years of experience using industry-standard apps creating solutions for clients.



How Adobe currently fits within our Studio

One of the core service offerings within our Studio is the creation of conceptual workflows for applications. For a large portion of the work, we rely on Figma. From black and white, low-fidelity wireframes through high-fidelity final output and prototypes, this application provides the framework we rely on.

However, we prefer to use Adobe products to create and edit custom images, icons and illustrations. The Adobe tools are robust and comprehensive, allowing us to modify pixel-based images in Photoshop, and create custom icons or illustrations in their vector-based Illustrator program.

In a simplified way, we use Figma to create the frames and "wrapper" that contains the messaging and actions a user undertakes throughout the course of a journey.

Customized elements we import into these flows include:

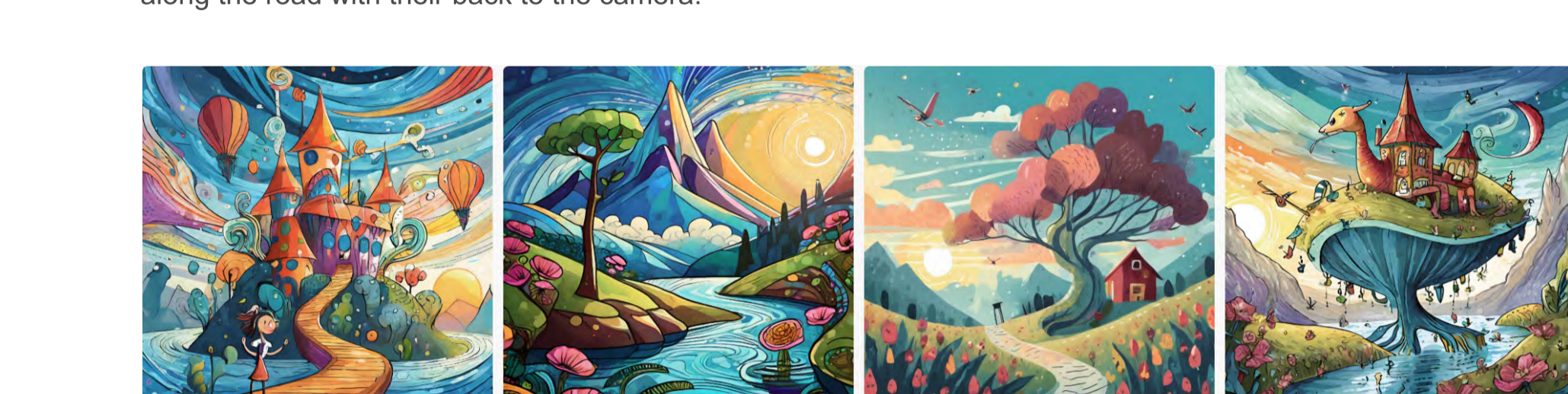
- **Images:** Photographic visuals - realistic
- **Illustrations:** Expressive, creative visuals – stylized, conceptual images that fit within a brand look and feel
- **Icons:** Smaller, simplified images that represent an idea or aid the user in wayfinding.

1 Ideas and concept generation

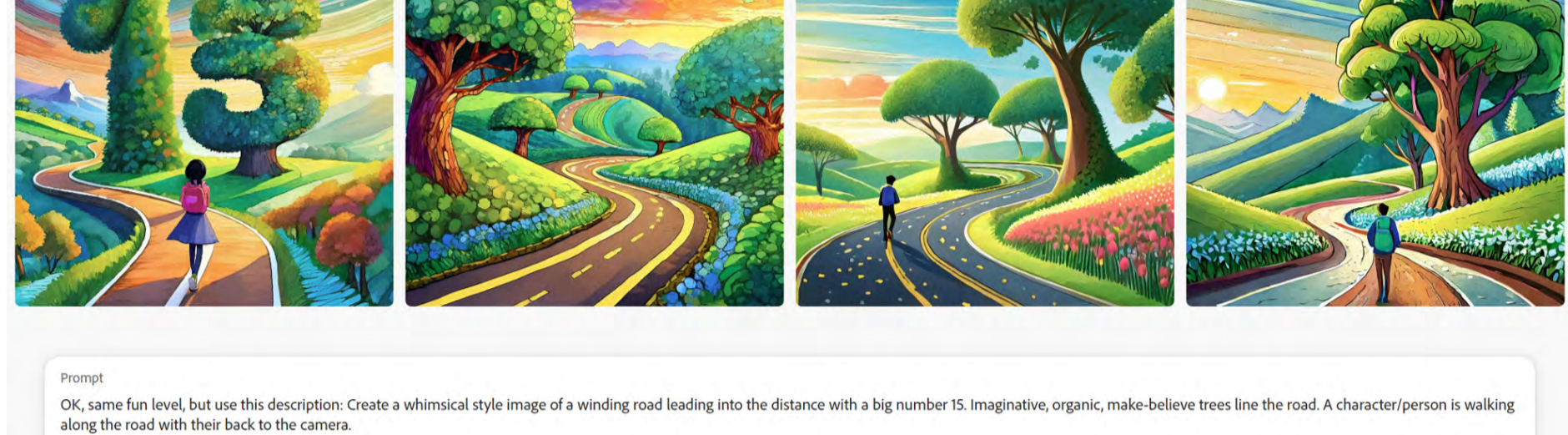
Let's start with the Engine: **Adobe Firefly** is AI engine that fuels AI-based features within their apps, and is a stand-alone text-to-image generator as well.

Within Photoshop, a user can describe an image they would like to create, and Firefly provides 4 variations at a time. This is similar to other AI generators on the surface. However, Adobe has based much of their engine's references on their Adobe stock library. As a result, Firefly's results tend to be clearly photographic/realistic in nature.

Firefly does not reference the entire web for inspiration, so does not provide the range of ideas and styles provided by other image generators. Additionally, the level of detail within their images is looser and not as detailed as other AI-based generators we reviewed.



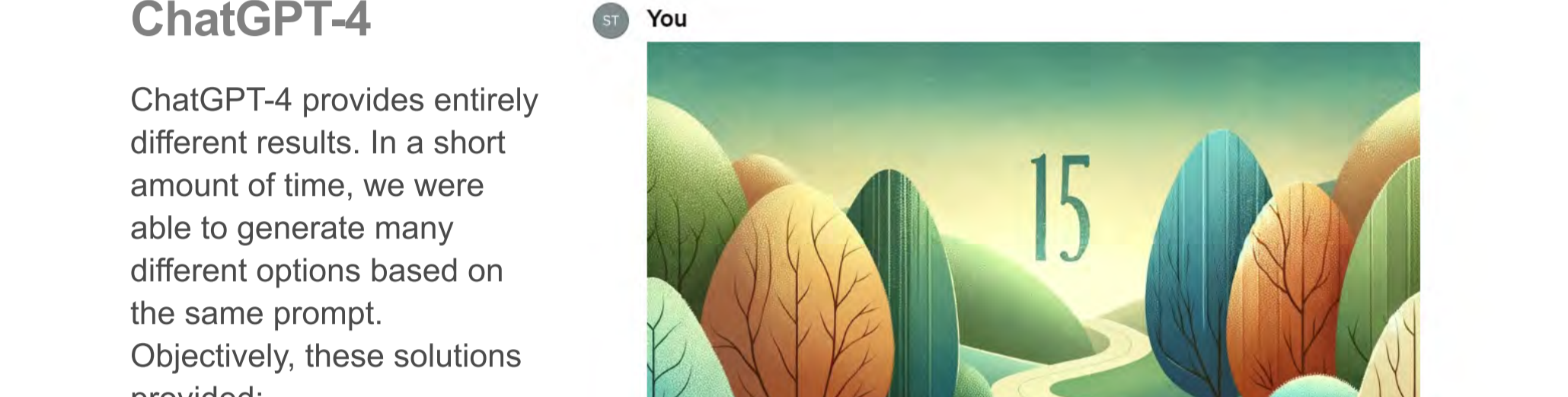
Prompt: Create a Dr. Seuss style image of a winding road leading into the distance with a big number 15. Trees in the style of Dr. Seuss illustrations line the road. A character/person is walking along the road with their back to the camera.



Prompt: Make it more fun and less literal.



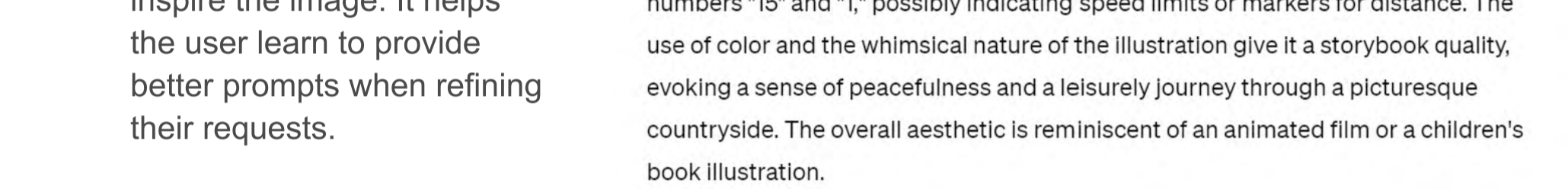
Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



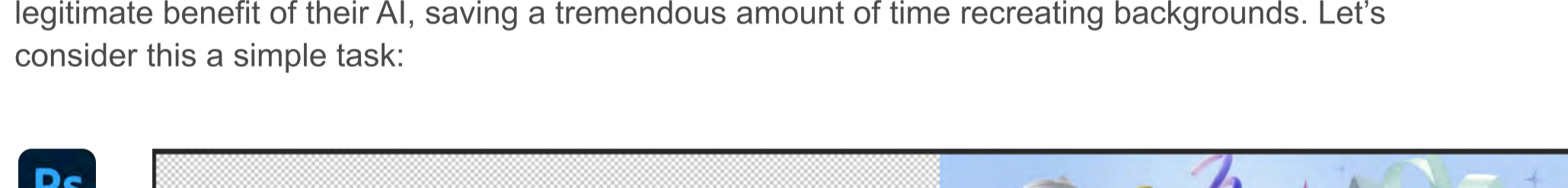
Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



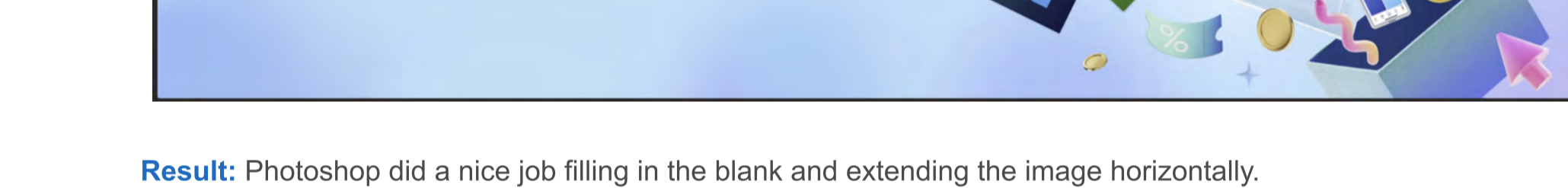
Prompt: Make it more fun and less literal.



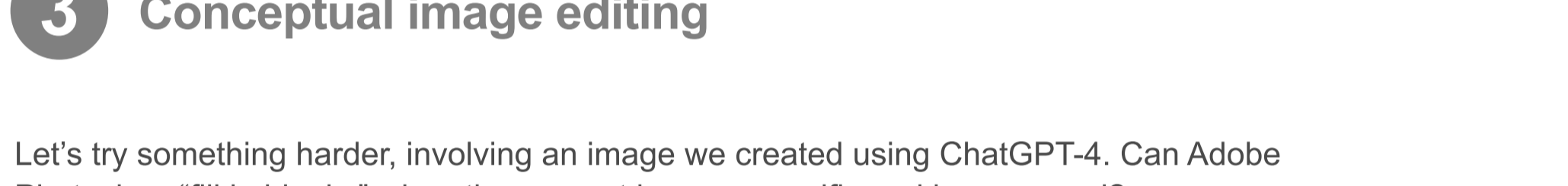
Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



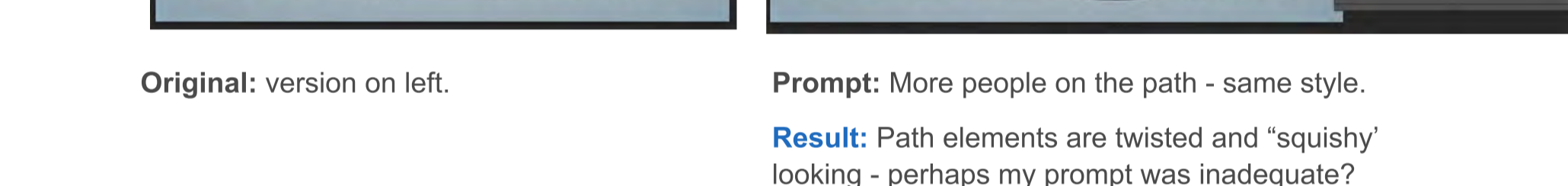
Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



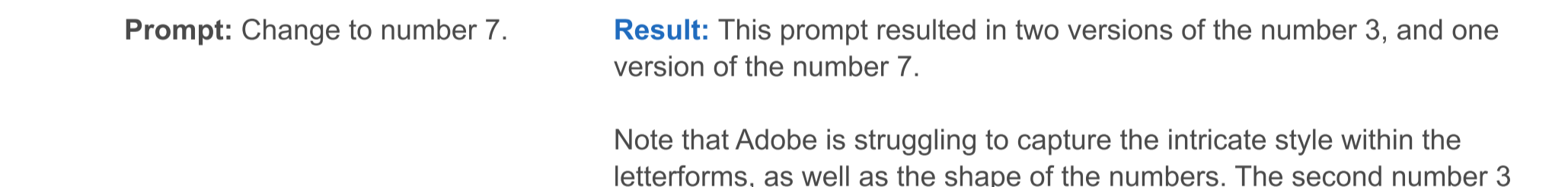
Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



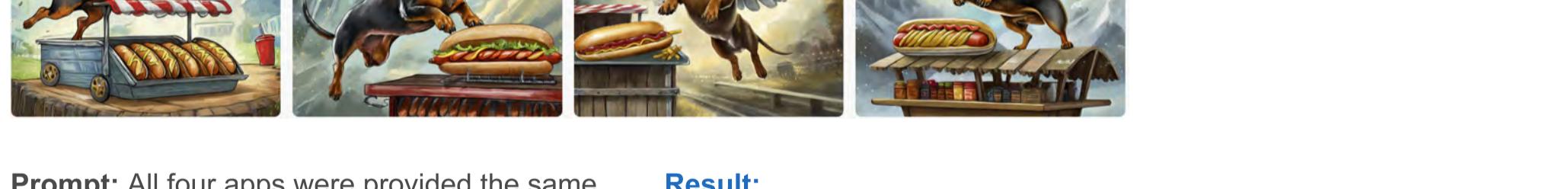
Prompt: Make it more fun and less literal.



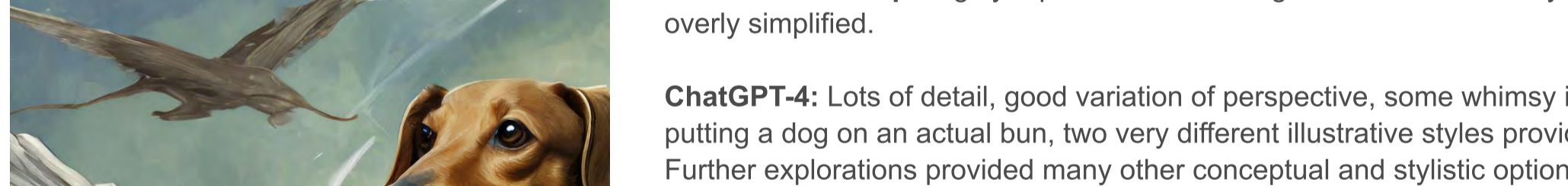
Prompt: Make it more fun and less literal.



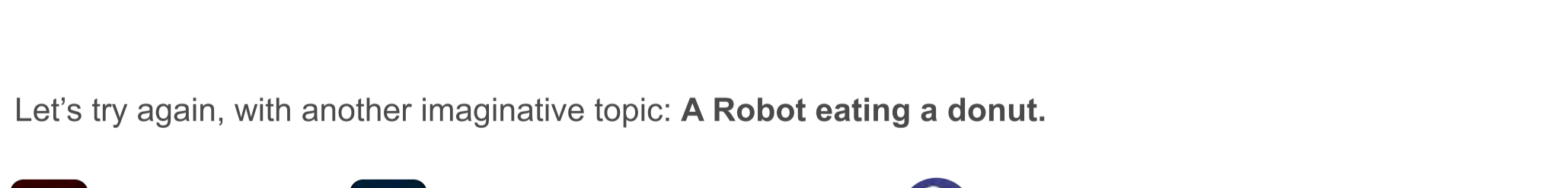
Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



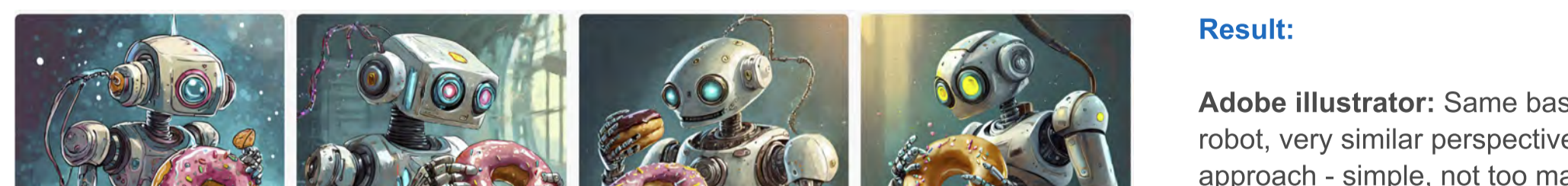
Prompt: Make it more fun and less literal.



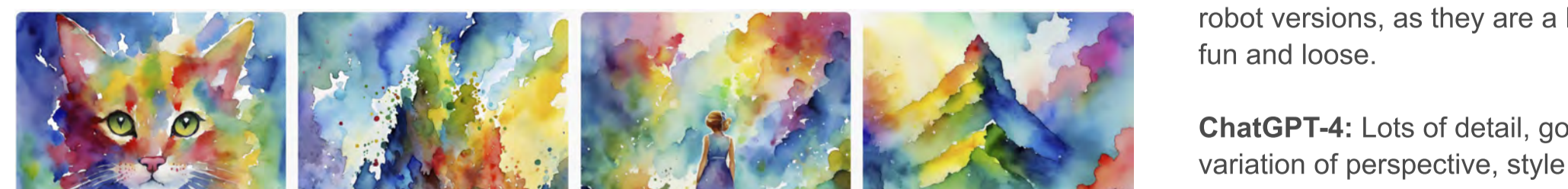
Prompt: Make it more fun and less literal.



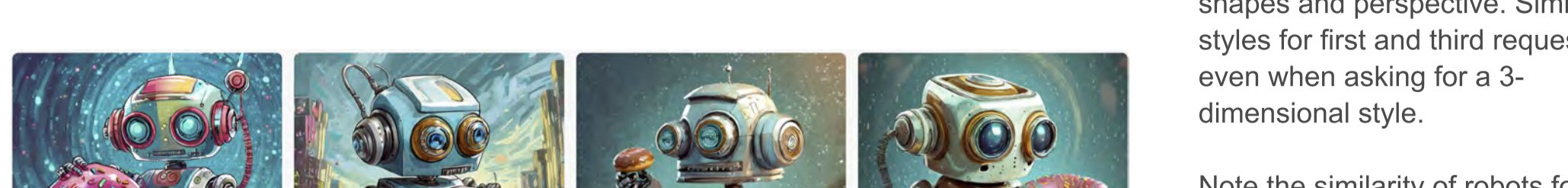
Prompt: Make it more fun and less literal.



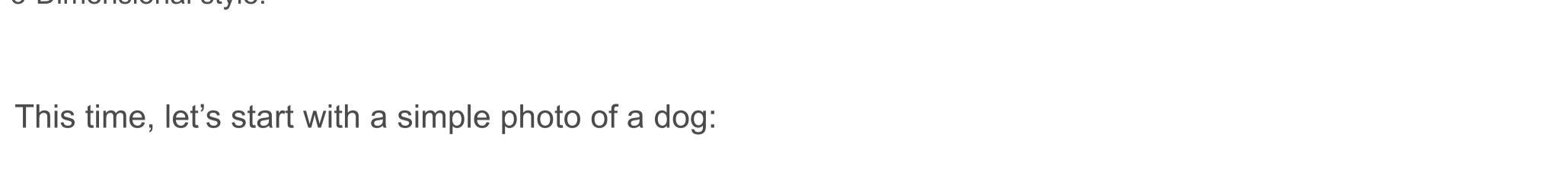
Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



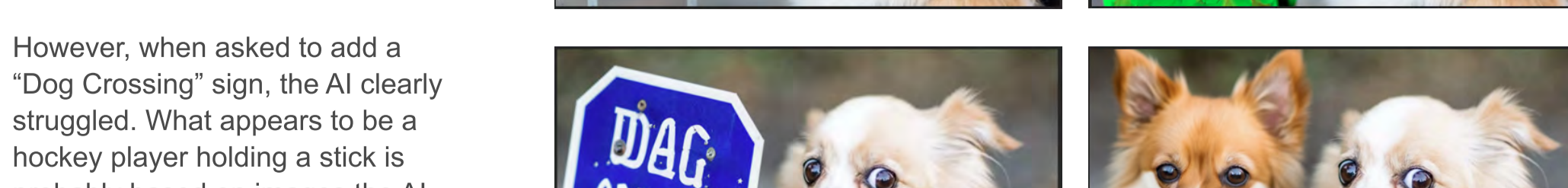
Prompt: Make it more fun and less literal.



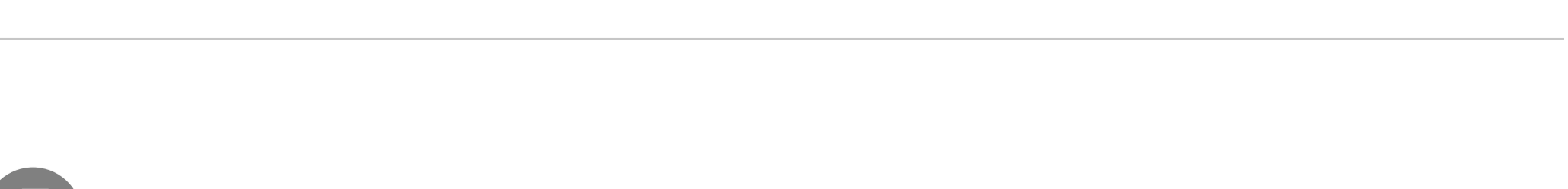
Prompt: Make it more fun and less literal.



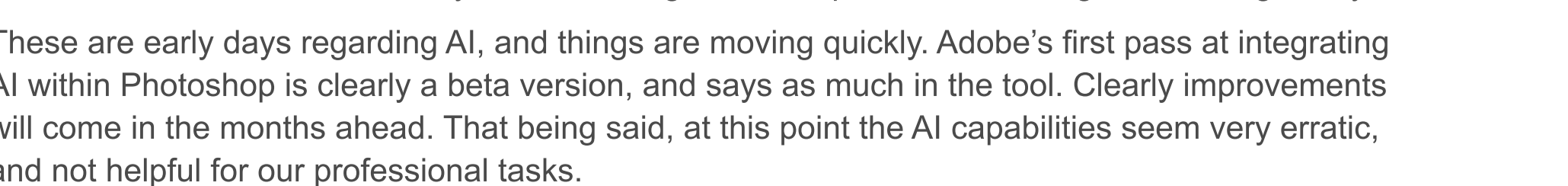
Prompt: Make it more fun and less literal.



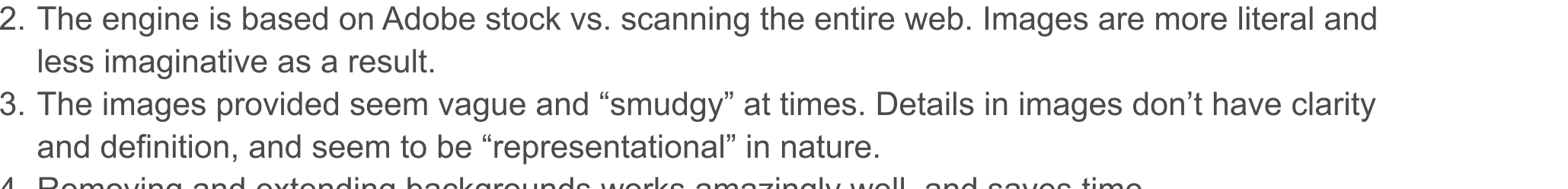
Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.



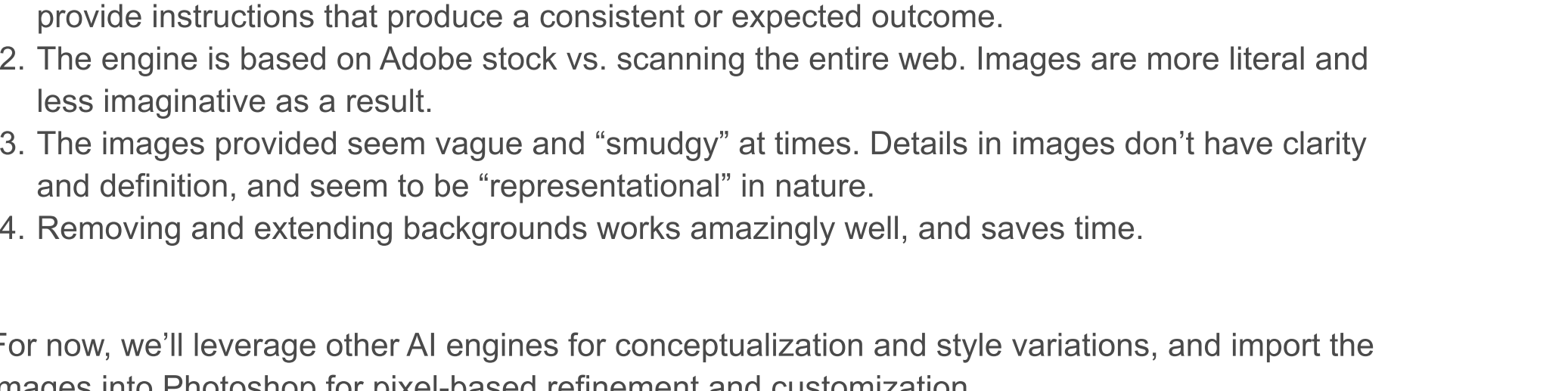
Prompt: Make it more fun and less literal.



Prompt: Make it more fun and less literal.

2 Basic image editing

OK, Let's cover the basics: Photoshop does an excellent job generating missing areas. This is a legitimate benefit of their AI, saving a tremendous amount of time recreating backgrounds. Let's consider this a simple task:



Result: photoshop did a nice job filling in the blank and extending the image horizontally.

3 Conceptual image editing

Let's try something harder, involving an image we created using ChatGPT-4. Can Adobe Photoshop "fill in blanks" when the request is more specific and less general?

Original: version on left.

Prompt: More people on the path - same style.

Result: Path elements are twisted and "squishy" looking - perhaps my prompt was inadequate? I tried again, below.

Prompt: Add more people on the path - same style.

Prompt: Add a dog.

Result: Photoshop/Firefly adds generated images as layers, so modifications don't degrade the base image.

The additions seem "smeary" and representational - vs. accurate and consistent with the original image style.

Note the dog, and the spider-like representation of 2 people walking.

Prompt: 2 more people walking.

Prompt: 2 more people walking.

Prompt: Change to number 7.

Result: This prompt resulted in two versions of the number 3, and one version of the number 7.

Note that Adobe is struggling to capture the intricate style within the letterforms, as well as the shape of the numbers. The second number 3 seems to be melting, and the number 7 has very little detail within the number at all, these still seem "representational" in practice.

In these cases, the AI generation isn't helping the designer modify a base image in a convincing way.

4 Conceptual image generation

Adobe's ads for this capability seem amazing - almost magic. Let's try a few random requests below to see if text-based image generation within Photoshop delivers a desirable outcome.

