Adobe Firefly

Designing a prompting pattern

IDP 2025 - Indiana University

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Hi, I’m Troy 👋

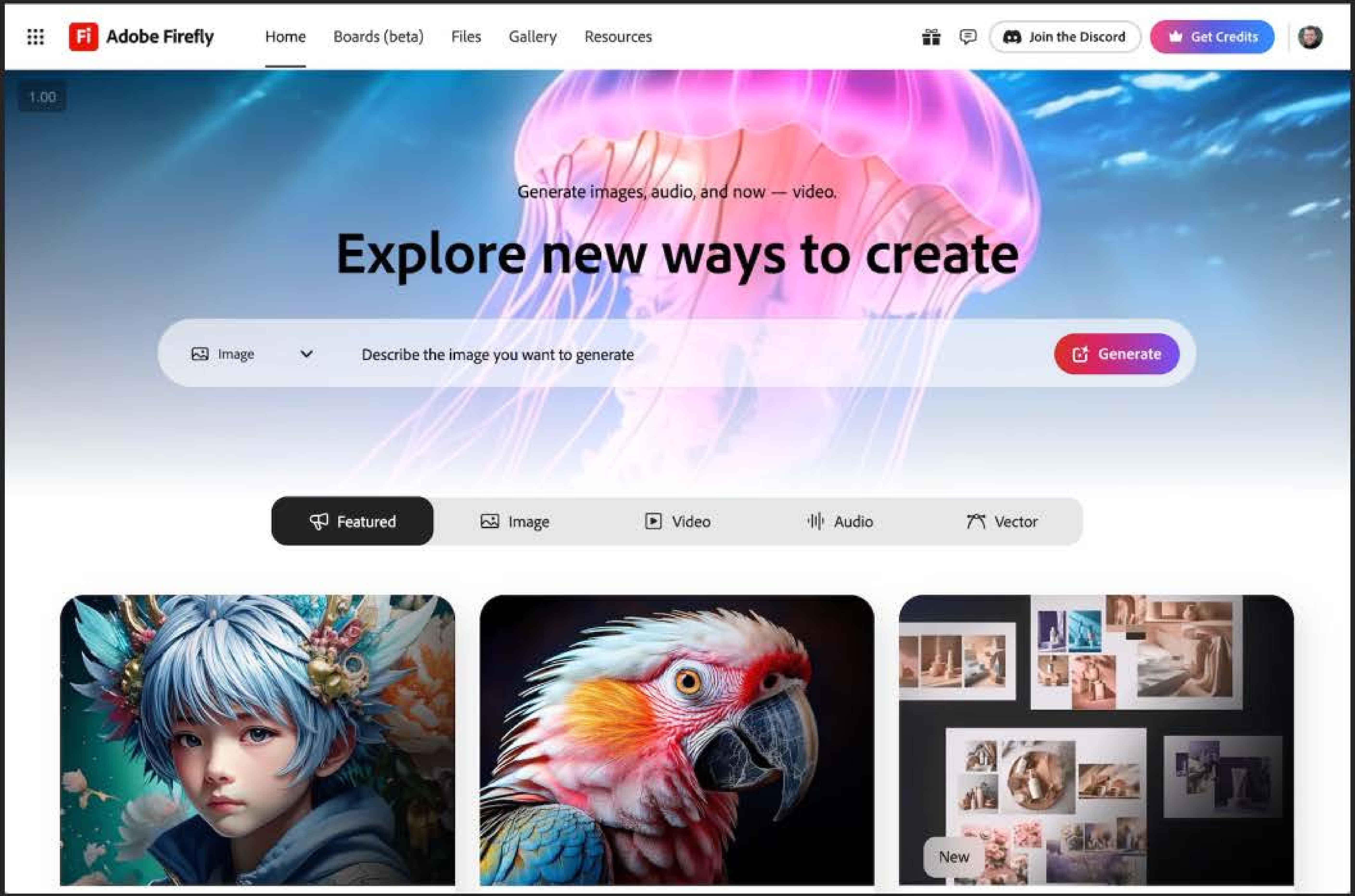
Since learning from Professor Siegel, I’ve been building creative tools at Adobe for 20 years, and I can tell you: some of the hardest design problems aren’t about making a single feature look nice — they’re about designing coherence across workflows and contexts.

That’s exactly the challenge I want to share with you.

Intro and Context

Adobe Firefly is Adobe's generative AI platform for creating images, videos, audio, and graphics.

Under the hood, Firefly is powered by a set of foundational AI models (image, audio, video, etc.). On top of those models, we offer user-facing features — like Text to image, Text to video, Generate sound effects (beta) , and various others. Think of AI models as the engines, and the various workflows as the cars you drive to get where you want to go.



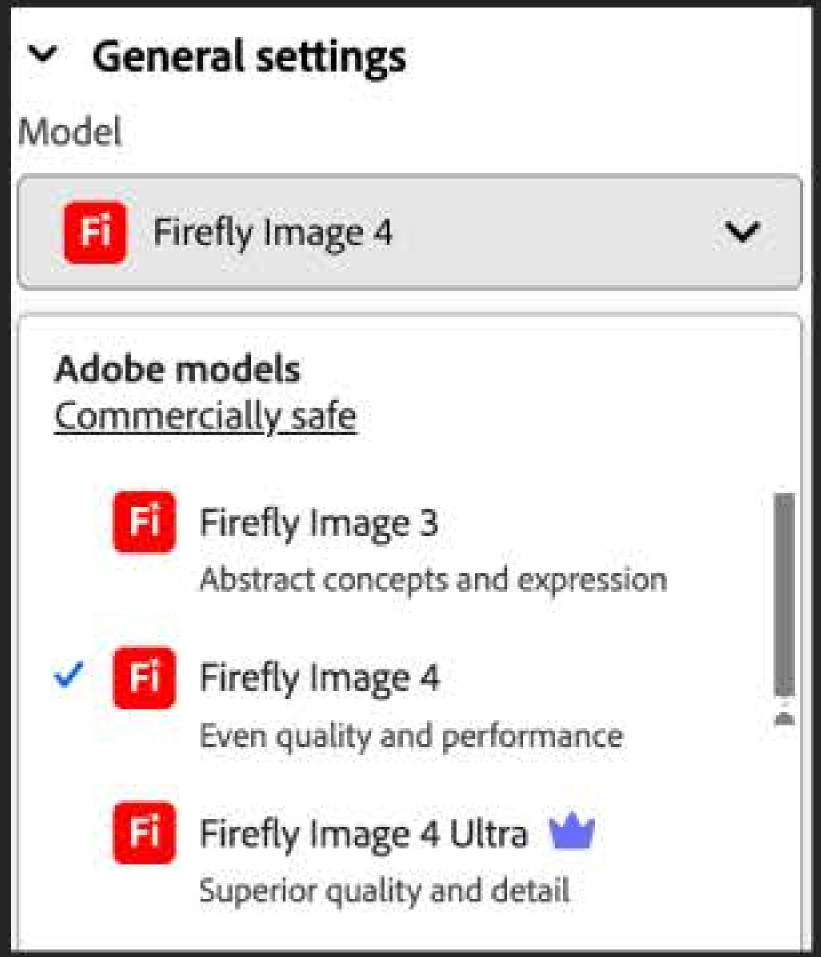
Generate images, audio, and now — video.

Explore new ways to create

3rd Party Models

Adobe is opening Creative Cloud and Firefly to 3rd party AI models, letting creators choose options like Imagen, Flux, Nano Banana, Runway, and more within the Firefly app and Creative Cloud Products.

This provides the creators who use our tools with the unique benefits of our Firefly model (commercial safety, IP protection, and provenance) —while celebrating and providing access to the latest generative AI advancements being made across the industry.



General settings

Model

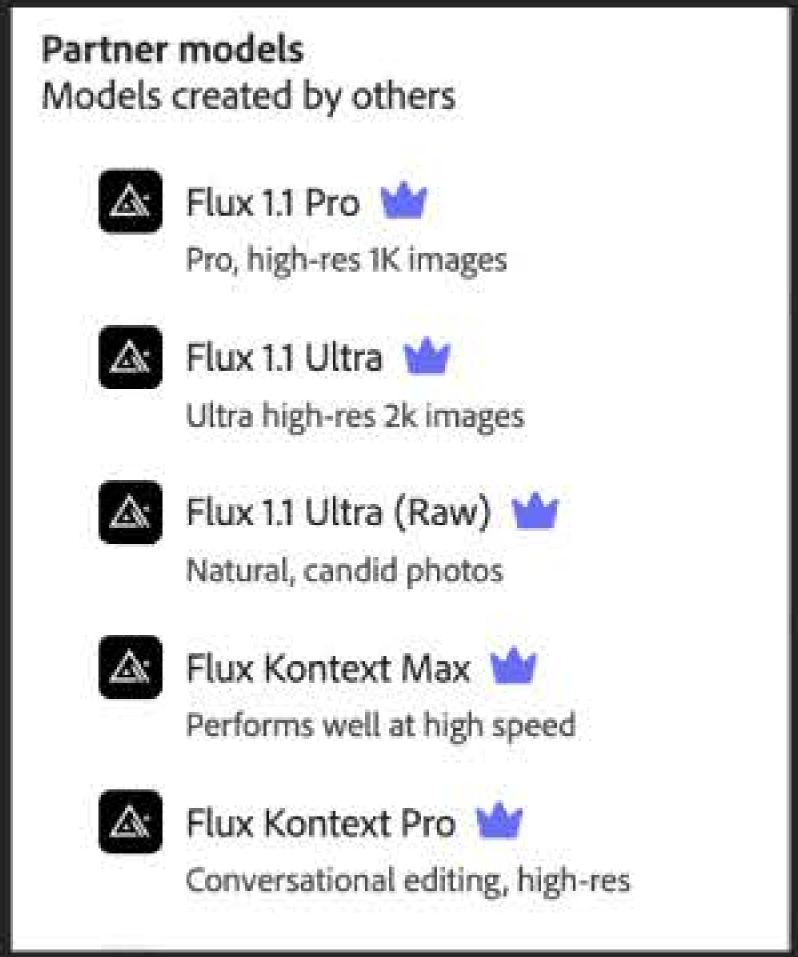
Fi Firefly Image 4

Adobe models
Commercially safe

Fi Firefly Image 3
Abstract concepts and expression

✓ Fi Firefly Image 4
Even quality and performance

Fi Firefly Image 4 Ultra
Superior quality and detail



Partner models
Models created by others

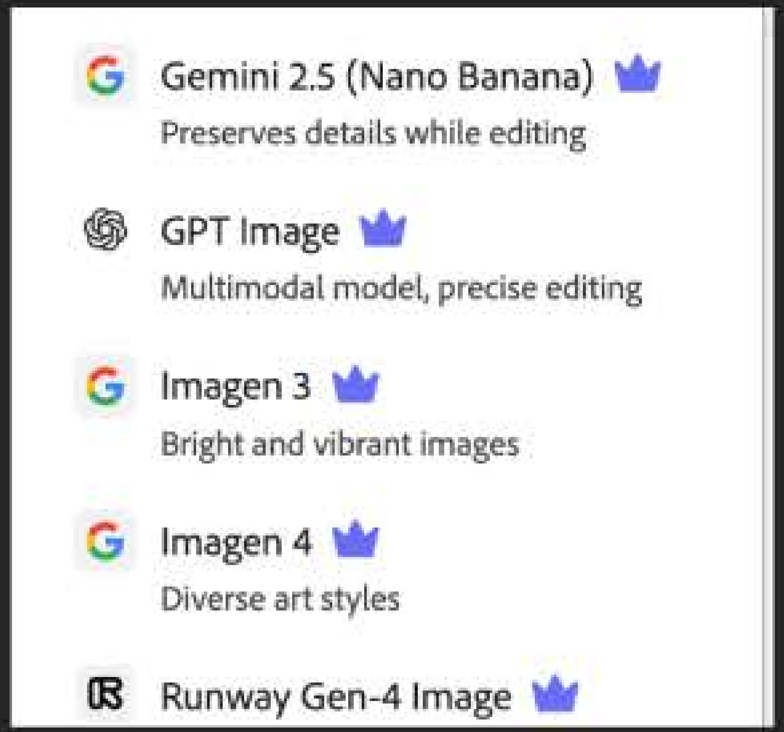
Flux 1.1 Pro
Pro, high-res 1K images

Flux 1.1 Ultra
Ultra high-res 2k images

Flux 1.1 Ultra (Raw)
Natural, candid photos

Flux Kontext Max
Performs well at high speed

Flux Kontext Pro
Conversational editing, high-res



Gemini 2.5 (Nano Banana)
Preserves details while editing

GPT Image
Multimodal model, precise editing

Imagen 3
Bright and vibrant images

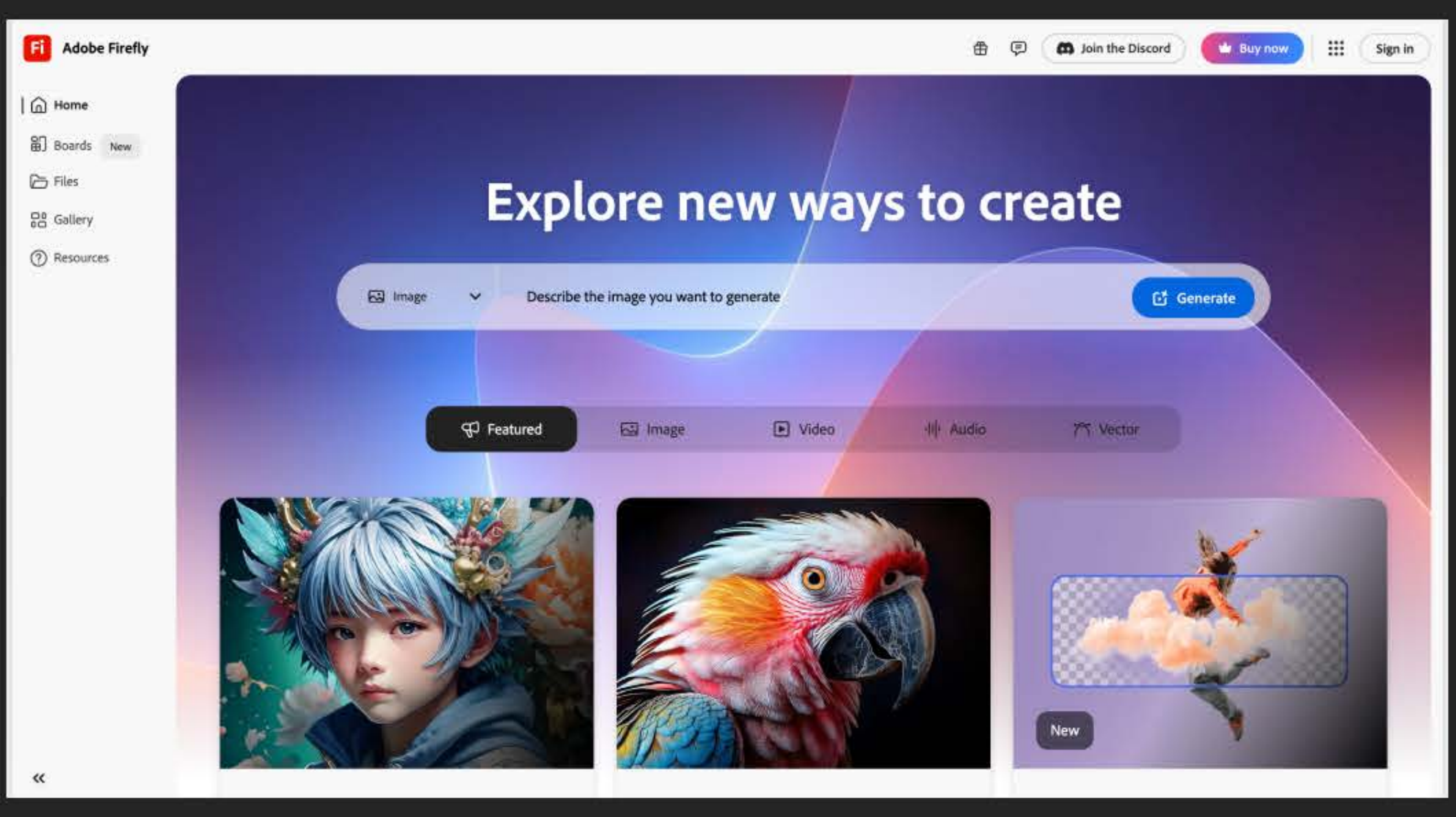
Imagen 4
Diverse art styles

Runway Gen-4 Image

Definitions

Firefly Home

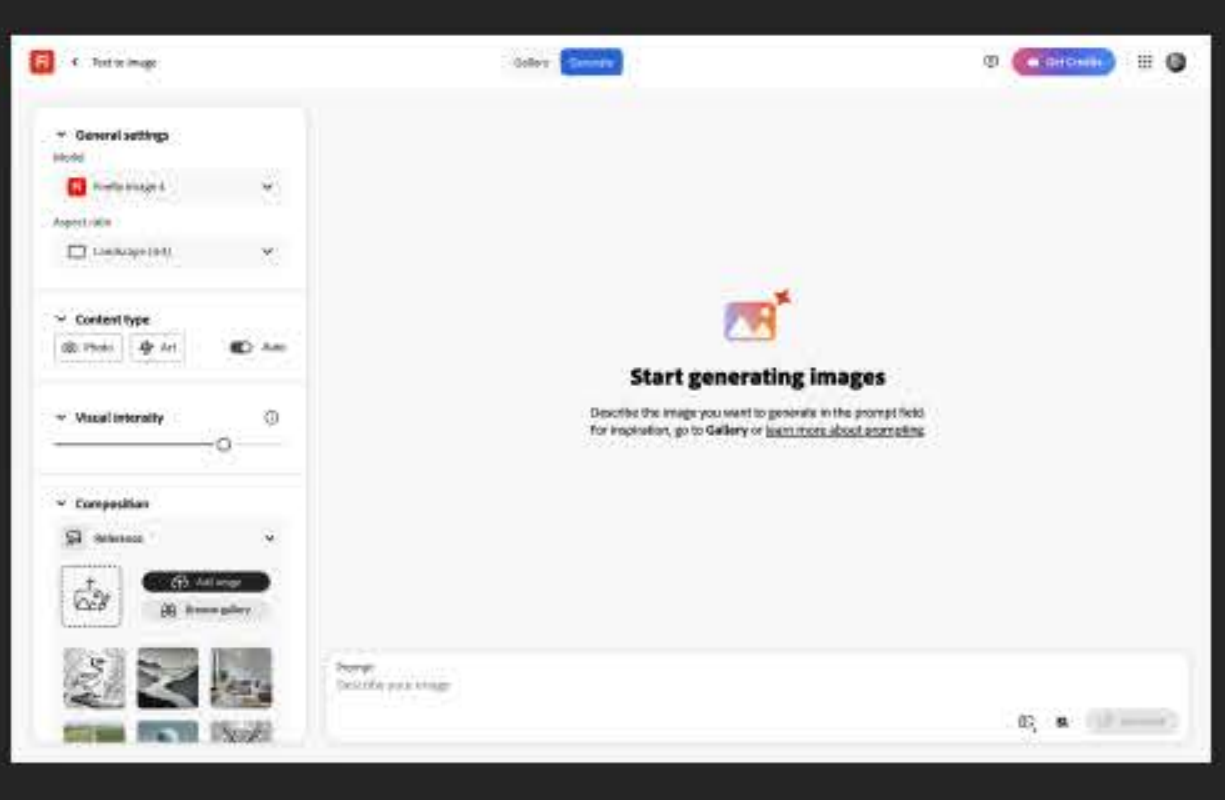
Firefly.adobe.com
This is the current landing page for Firefly experiences.

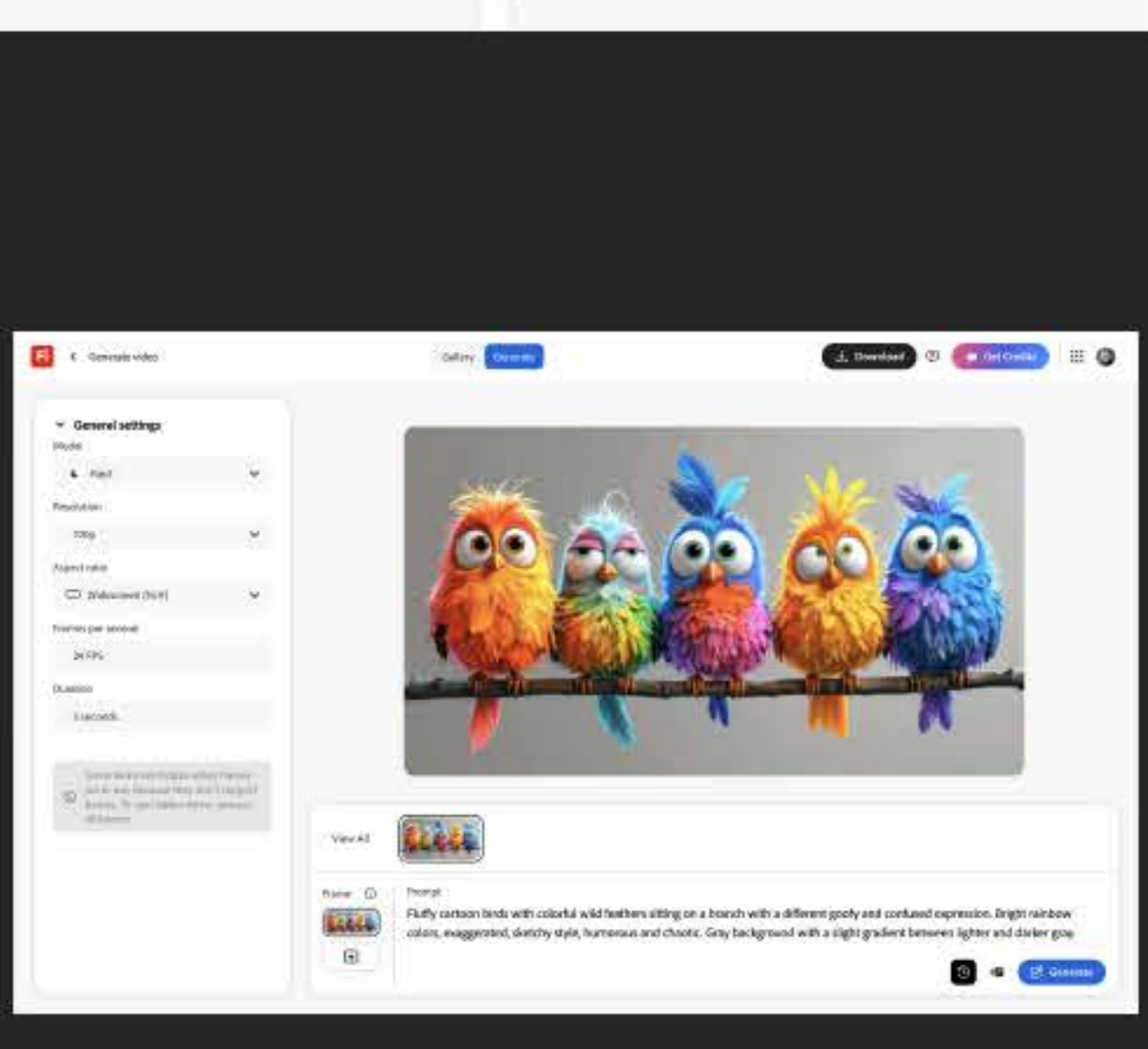


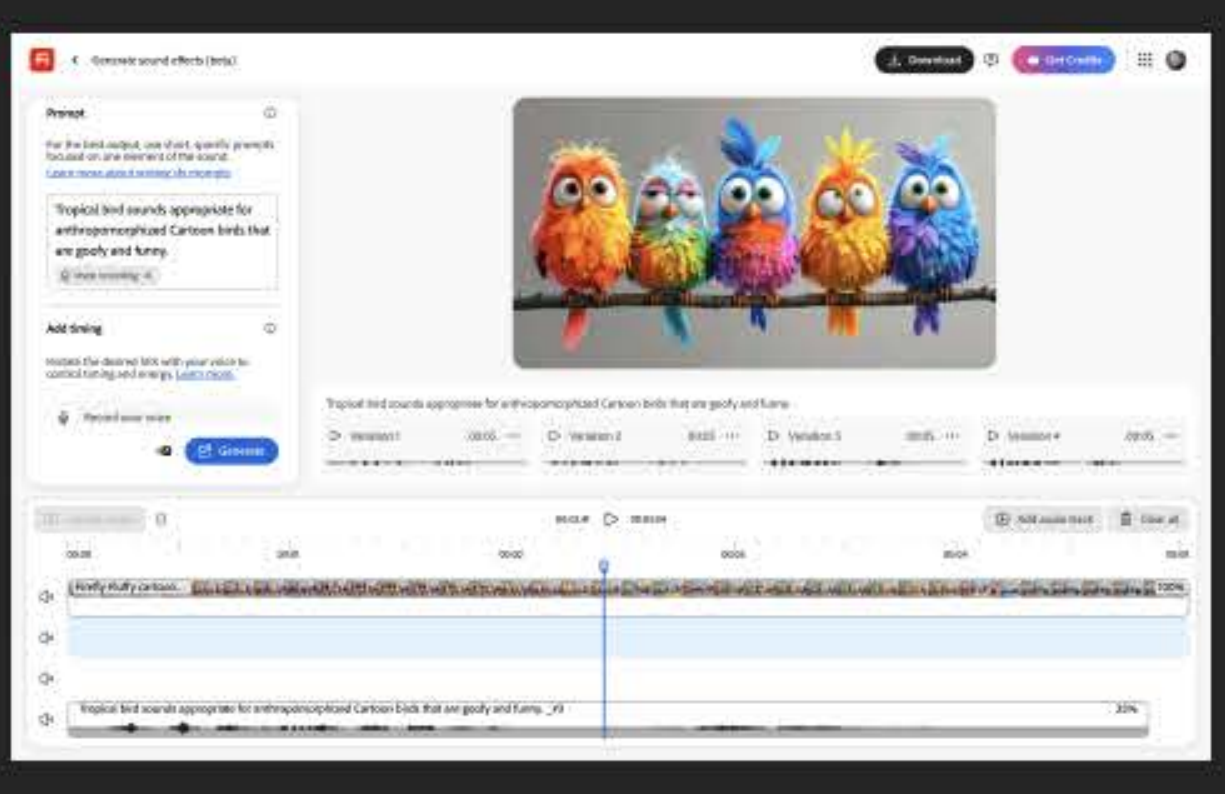
Firefly workflows

Various features such as:

- Text to image
- Create video
- Generate sound effects (beta)
- etc…







Models (Firefly and 3rd Party)

AI systems trained on large datasets of visual, audio, or multimodal content that can generate new media (images, videos, audio, 3D assets, etc.) from text prompts, and other inputs.

Adobe Firefly

Nano Banana

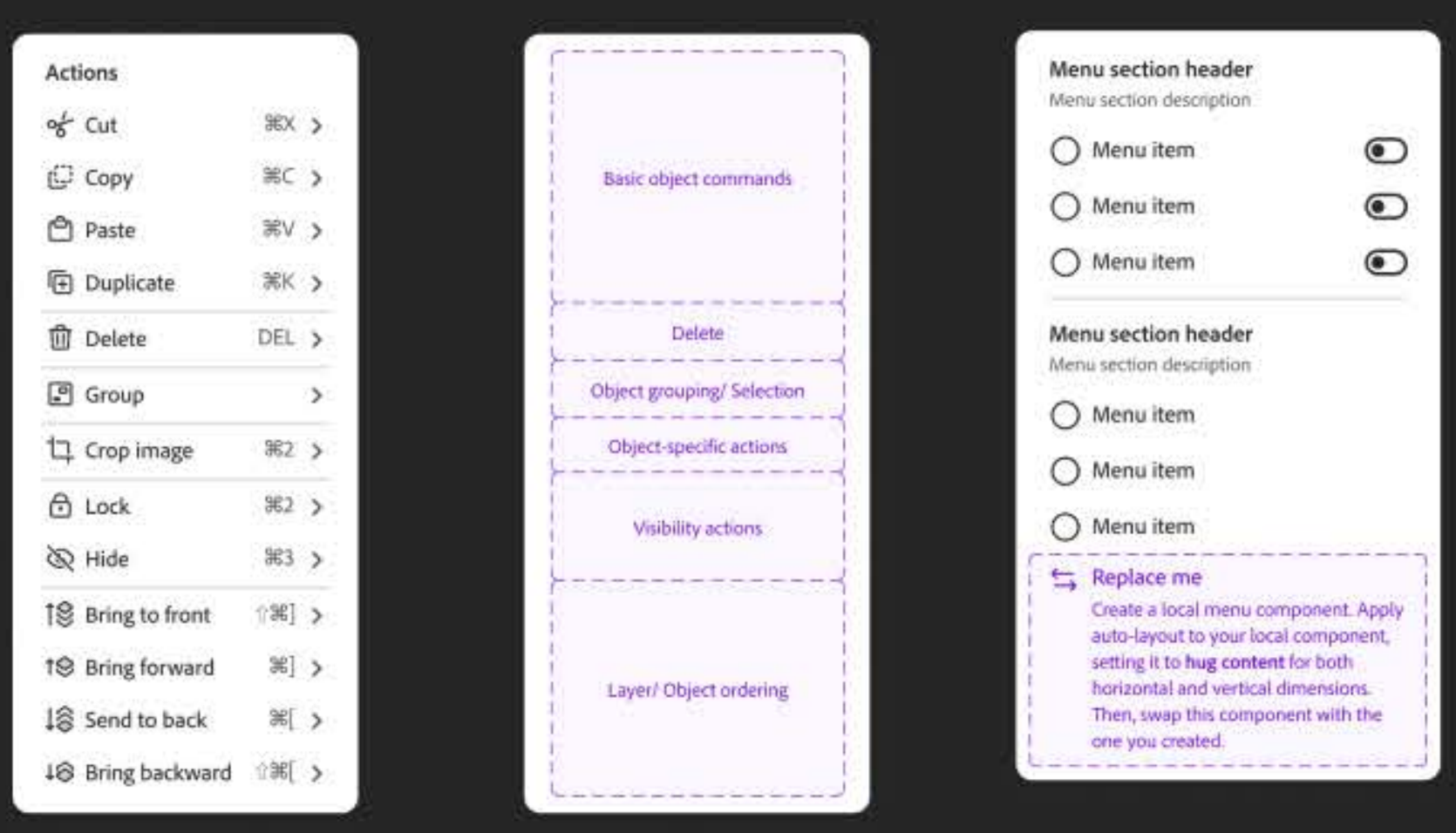
Flux Ultra

GPT Image

UX Pattern - common definition

A User experience (UX) pattern is a reusable solution to a recurring user experience problem.

It's more than just a single component (like a button or dropdown) — it's a structured grouping of components, interactions, and behaviors that solve a common task in a way that's recognizable, efficient, and consistent across experiences.t



Actions menu (example of shipping UX pattern in a Figma component form.)

UX Patterns as blueprints

A **user experience pattern** is the conceptual idea. **T**hink of it like the architect's drawing of a house:

- It describes the **parts** (components), the **connections** (interactions), and the **expected outcomes** (behaviors).
- It's reusable, abstract, and exists independently of any specific implementation.
- Example: "A carousel pattern cycles through multiple images with next/previous controls and optional auto-advance."

This blueprint helps designers and developers share a **common mental model** of how something should work, even before they build it.

VS.

Instantiations as realizations

An **instantiation of a pattern** is the concrete form—a working version of the idea:

- In design: a **Figma component** with defined layers, constraints, and variants.
- In engineering: **a code component** with properties, event handlers, and styles.
- Example: *"This specific carousel built into Adobe Express with arrow buttons styled according to the Spectrum design system."*

It's the moment the blueprint becomes something people can actually use, test, and ship

Why the distinction matters

- **Patterns guide consistency**. Without the abstract blueprint, each implementation risks drifting.
- **Instantiations drive usability.** Without a working version, the pattern remains theoretical.
- This helps understanding of how ideas travel: from **concept → artifact → experience.**

In practice

It's true that in everyday practice, we often just say "pattern" and mean both the idea *and* the thing. That shorthand works fine when everyone shares context.

But even with shared context, making the distinction explicit can sharpen thinking:

- Are we talking about the idea we agree on?
- Or the Figma component in our design system?
- Or the shared code component in shipping products?

With practice, designers develop an intuition for when "pattern" means both, and when clarity requires distinguishing between blueprint and realization.

Product Designer

Focus: The end-user experience within one product — flows, screens, interactions, and visual detail.

Scope: Deep in the context of one domain (e.g., video editing, photo retouching, document review). They optimize for the unique needs of that audience.

Artifacts: Wireframes, prototypes, feature specs, usability testing outputs.

Measures of Success: Includes task success, user satisfaction, feature adoption, and ccNet Promoter

score (NPS) for their product.

Constraints: Must balance user needs, product strategy, and engineering constraints — sometimes bending the design system to fit specific product requirements.

VS.

System Designer

Focus: The design language and infrastructure that supports many products. Ensures consistency, scalability, and adaptability across teams.

Scope: Broad across domains — not solving for one app but for patterns, primitives, and reusable guidelines that work in many contexts.

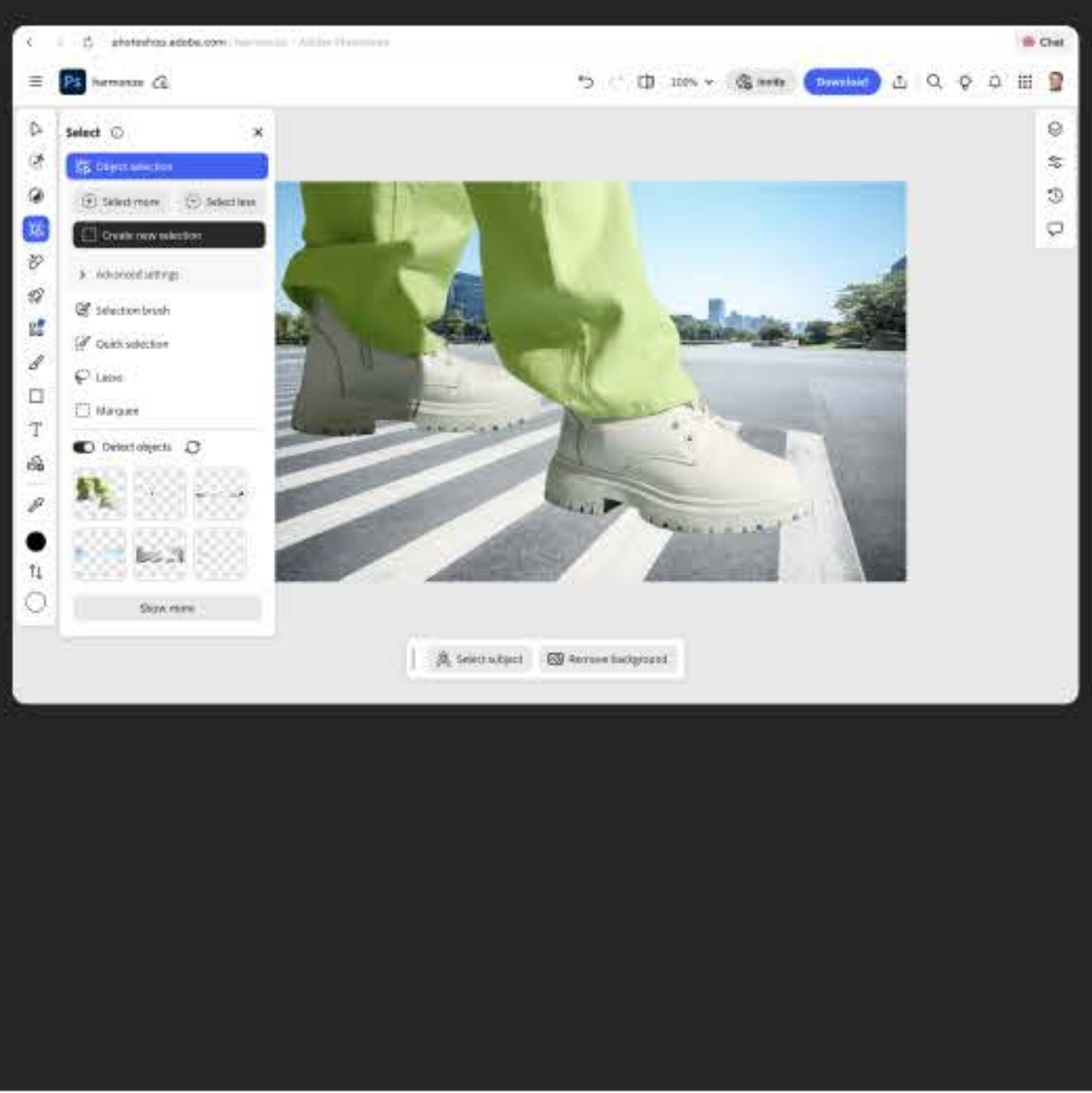
Artifacts: Component libraries, pattern documentation, usage guidelines, governance models.

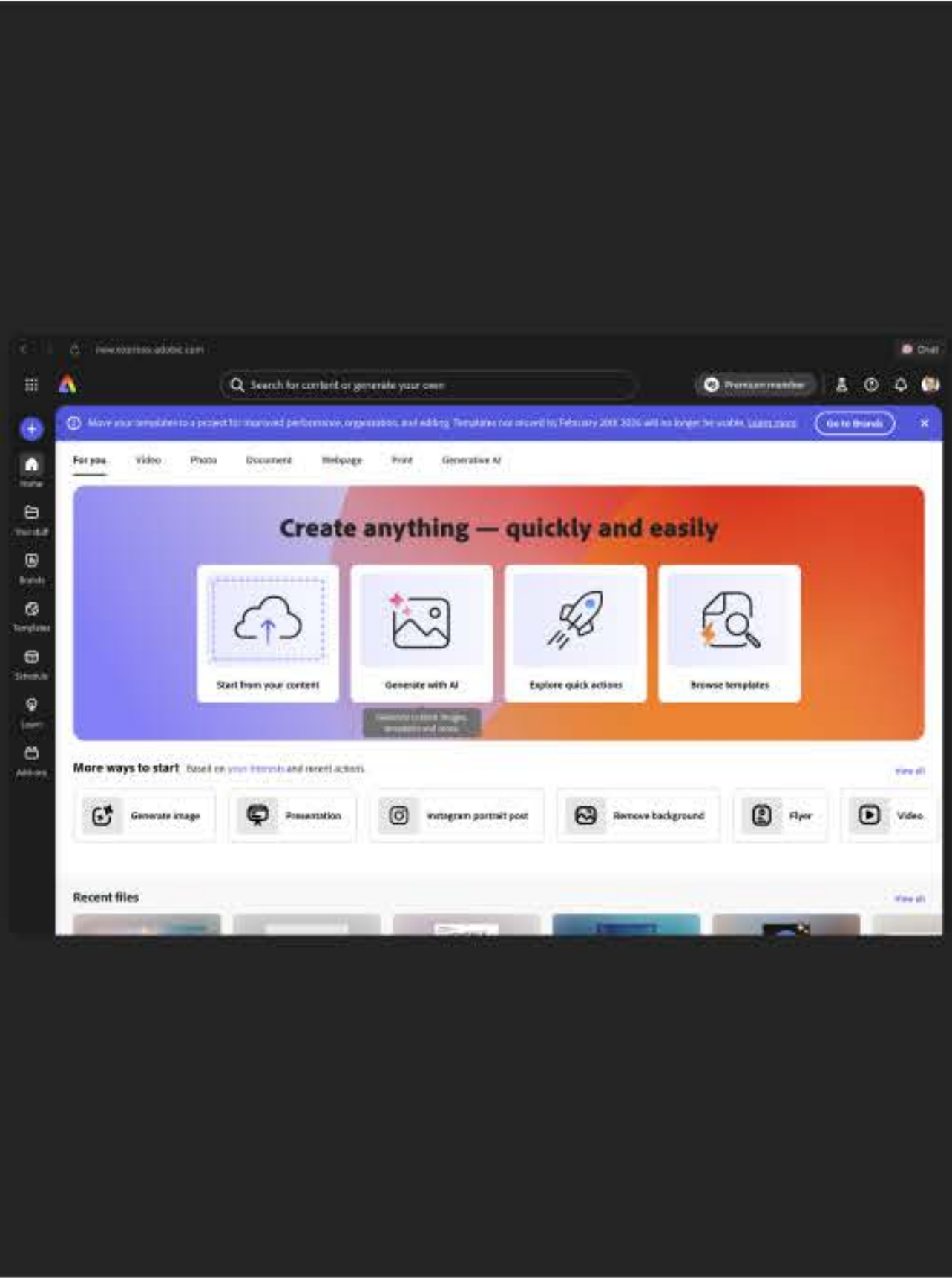
Measures of Success: System adoption, cross-product consistency, reduction in design/engineering duplication, speed of implementation.

Constraints: Must balance flexibility (supporting diverse product needs) with consistency (maintaining brand and usability standards).

Adobe web app

Adobe web apps like Photoshop Web or Adobe Express are full creative tools for making, editing, and sharing projects, while Firefly web pages focus on single generative AI tasks like creating images, text effects, or recolors.

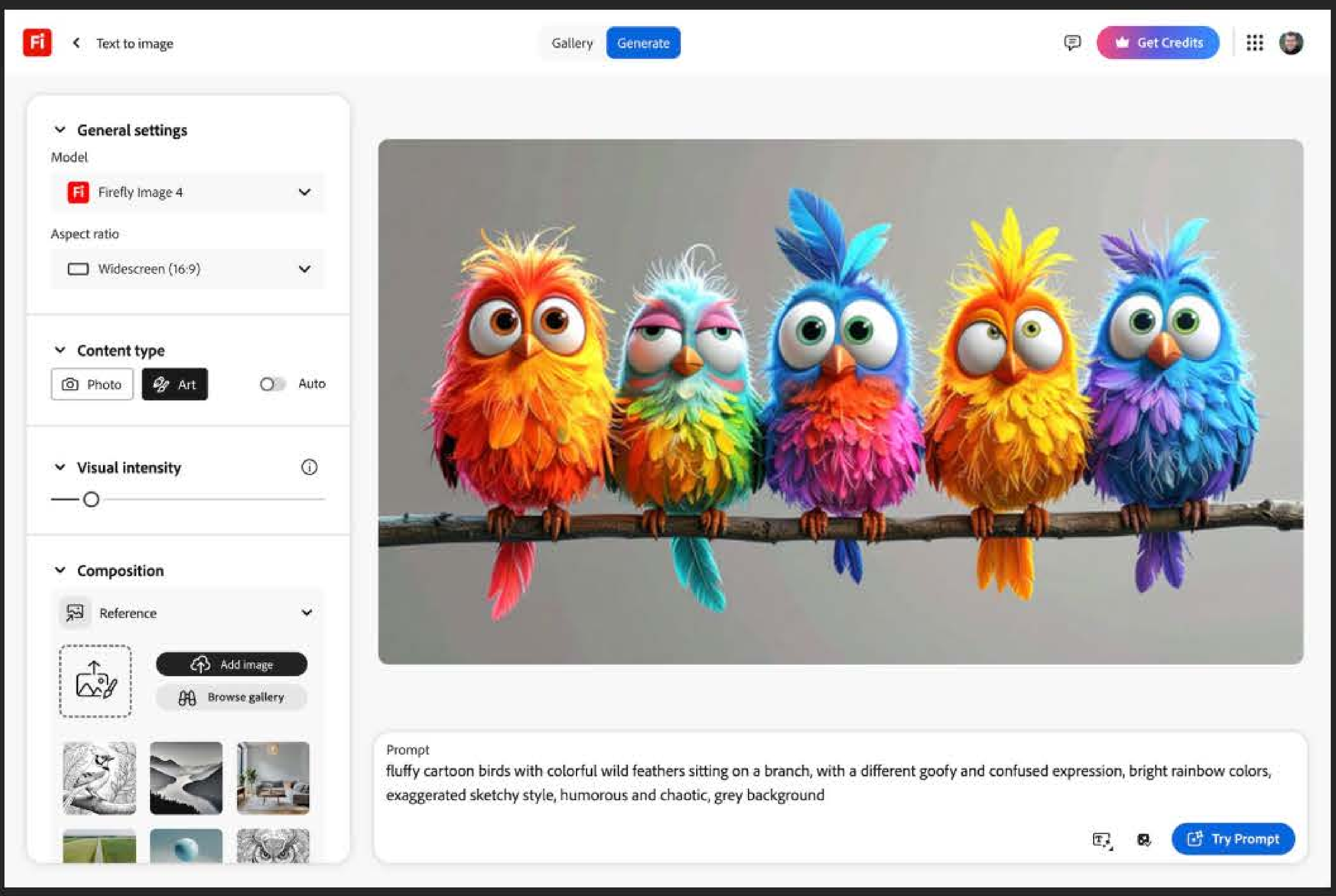




Input and output

Current user experience

This is the current Firefly “Text to image” interface.



Model
Firefly Image 4

Aspect ratio
Widescreen (16:9)

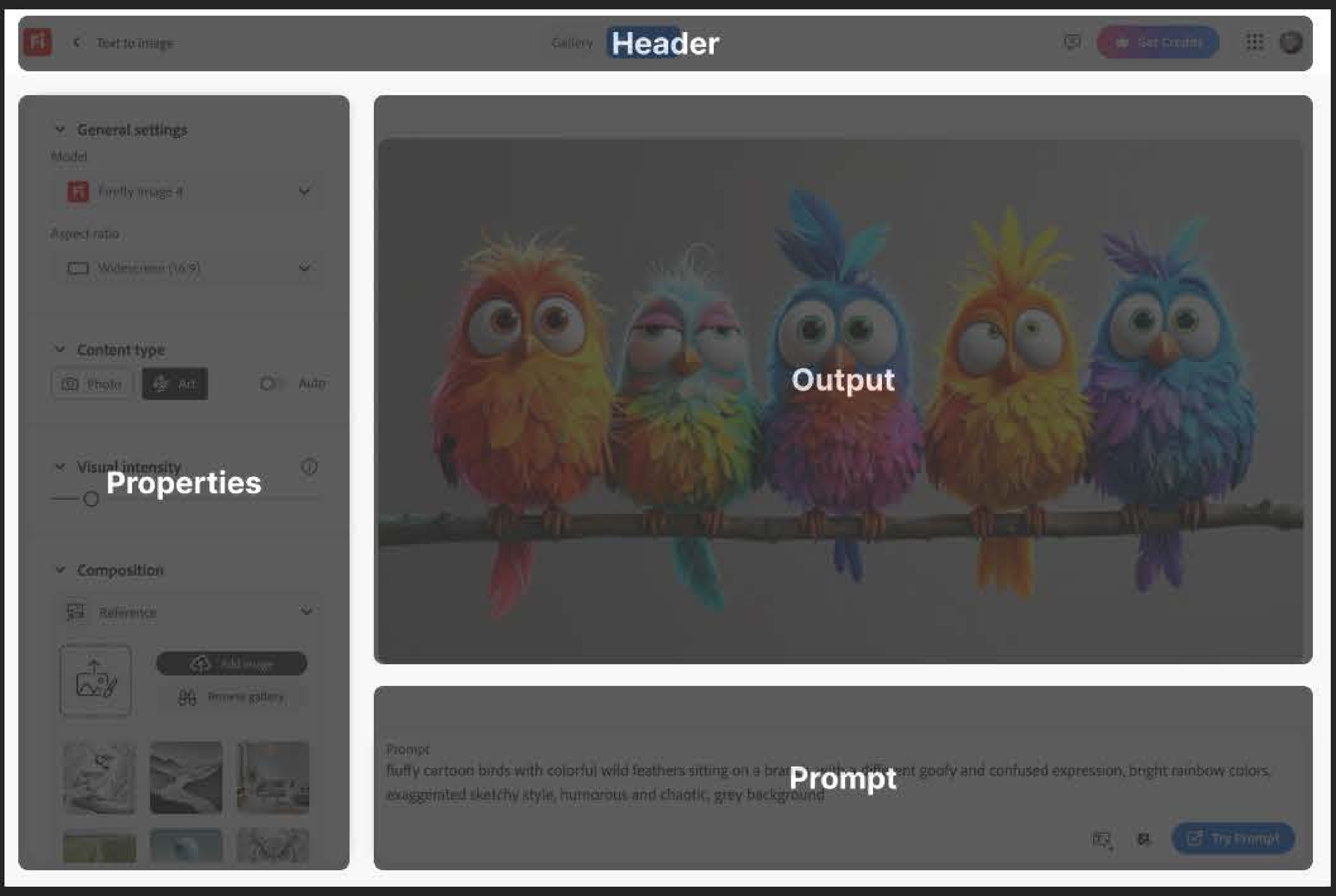
Reference

Prompt
fluffy cartoon birds with colorful wild feathers sitting on a branch, with a different goofy and confused expression, bright rainbow colors, exaggerated sketchy style, humorous and chaotic, grey background

4 patterns

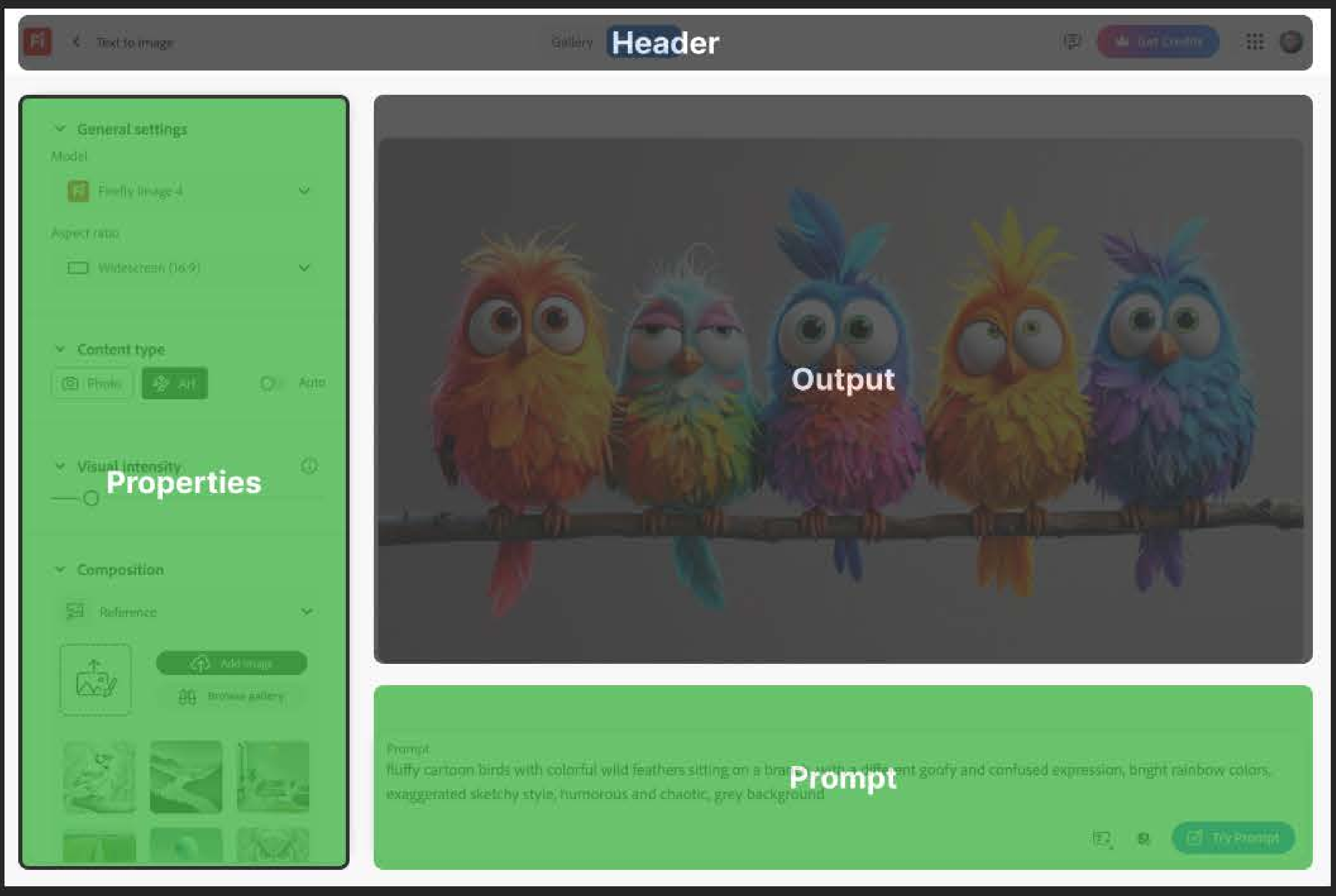
If you squint, you see 4 major affordance groups or “patterns”:

- Header bar
- Properties panel
- Output viewer
- Prompt bar



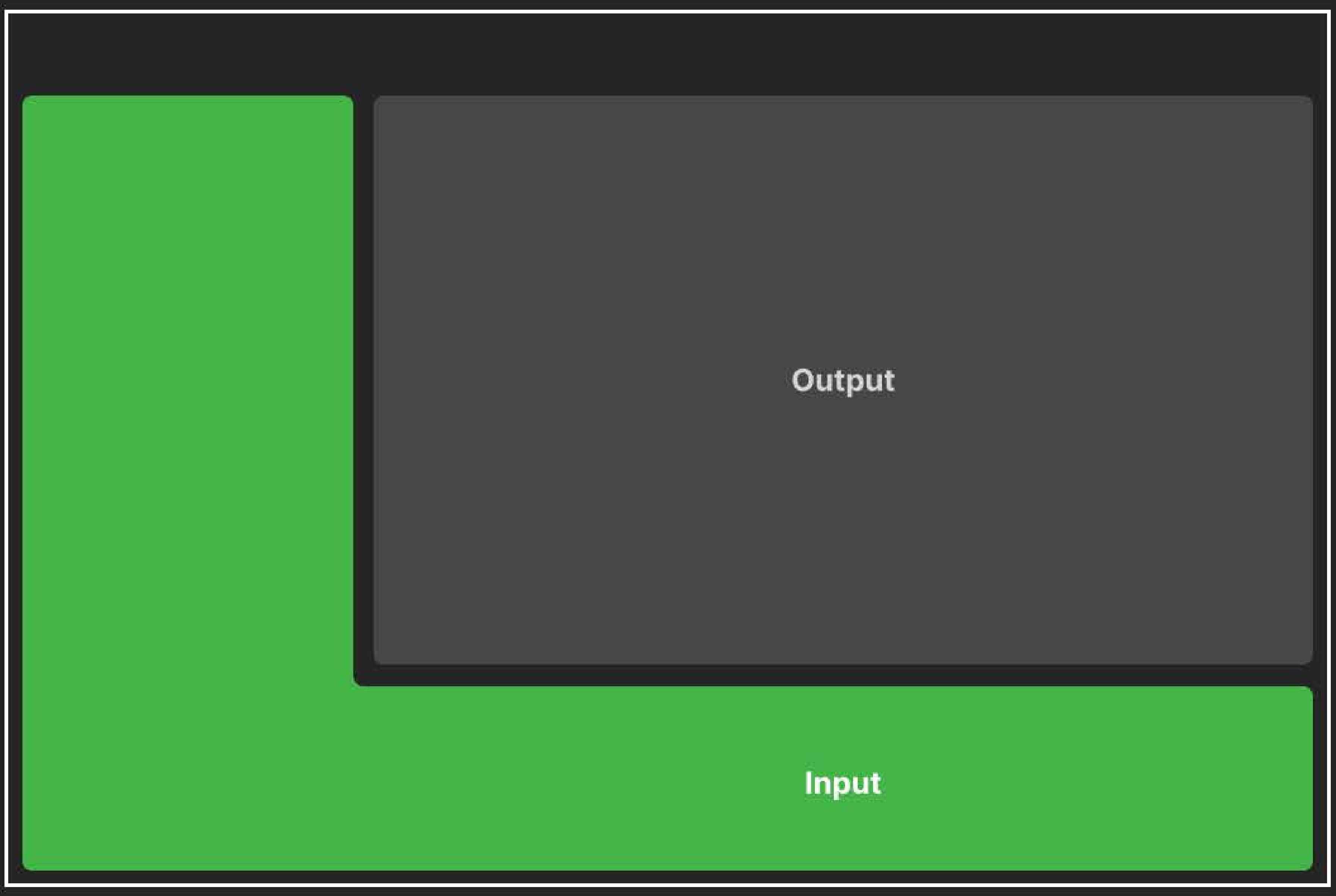
Prompting input happens in only 2 of these 4 patterns

- Properties panel
- Prompt bar



Think of it this way

The properties panel and the prompt bar are both part of the same system: the set of input affordances that make up the prompting experience. While the prompt bar is often little more than conversational text, it sometimes contains affordances for multimodal input. In generative AI, multimodal prompting means combining different types of data—like text, images, or audio—into a single prompt, giving the AI richer guidance and enabling more accurate or creative outputs.

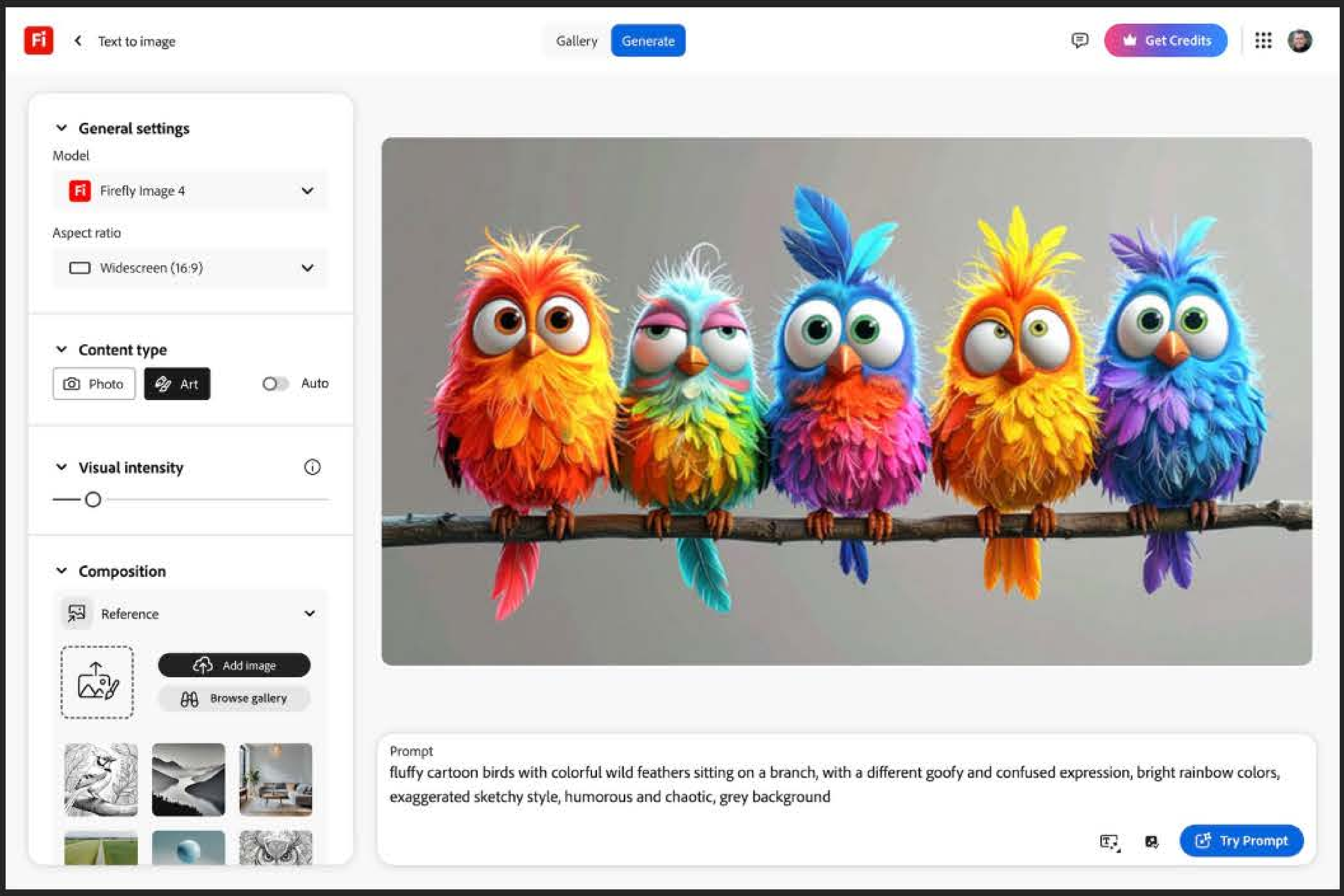


Here’s the nuance

Workflow-specific needs

Each generative workflow or quick action needs something slightly different. **Video** prompts might need camera guidance. **Sound** prompts might need timing or emotion cues. **Image** prompts might need references for style or composition. If we’re not careful, each workflow develops its own quirky version of prompting (and associated UX) — and suddenly Firefly feels like a collection of mismatched tools instead of a coherent family.

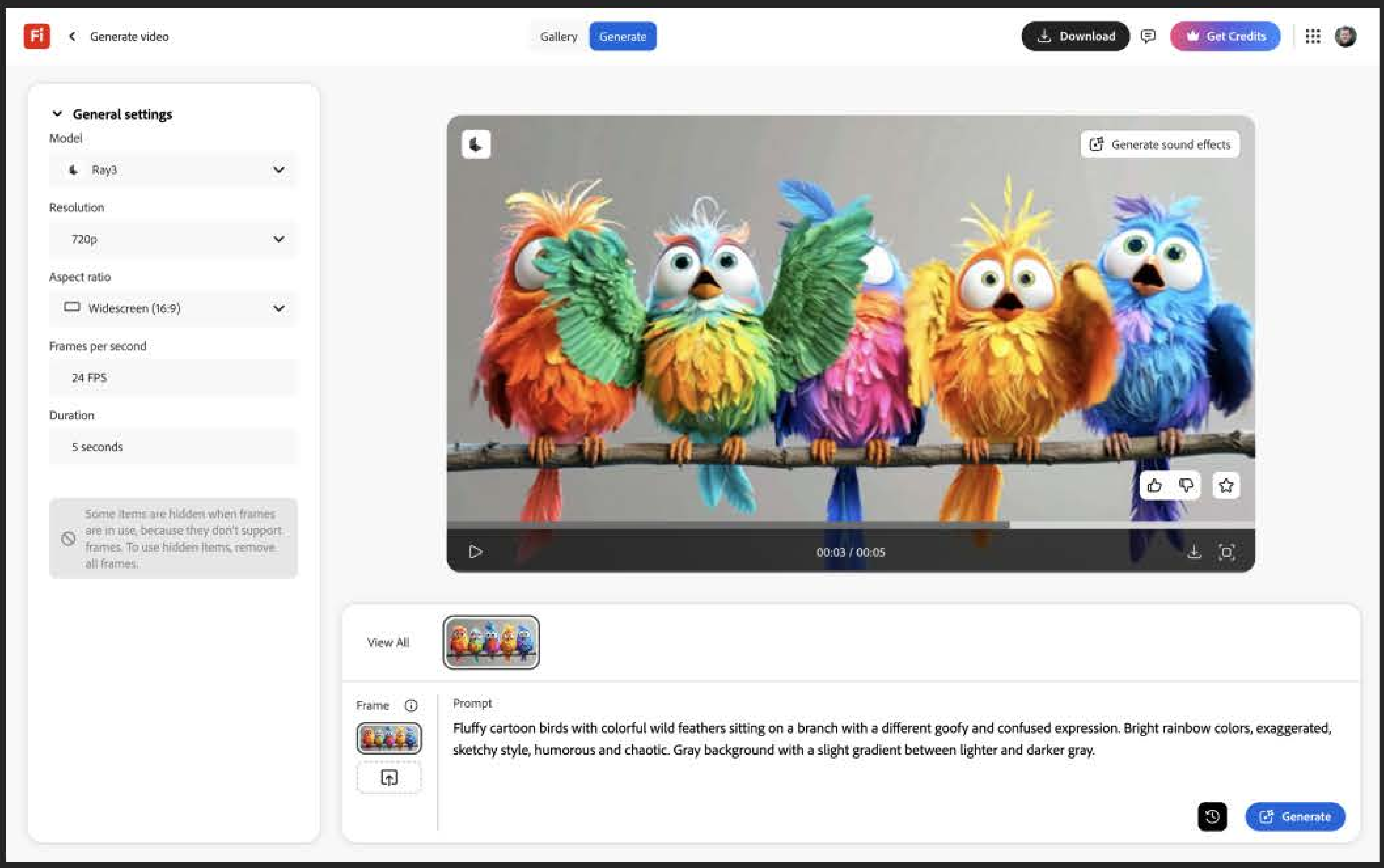
Text to image



General settings
Model: Firefly Image 4
Aspect ratio: Widescreen (16:9)
Content type
Visual intensity
Composition
Reference

Prompt
fluffy cartoon birds with colorful wild feathers sitting on a branch, with a different goofy and confused expression, bright rainbow colors, exaggerated sketchy style, humorous and chaotic, grey background

Generate video

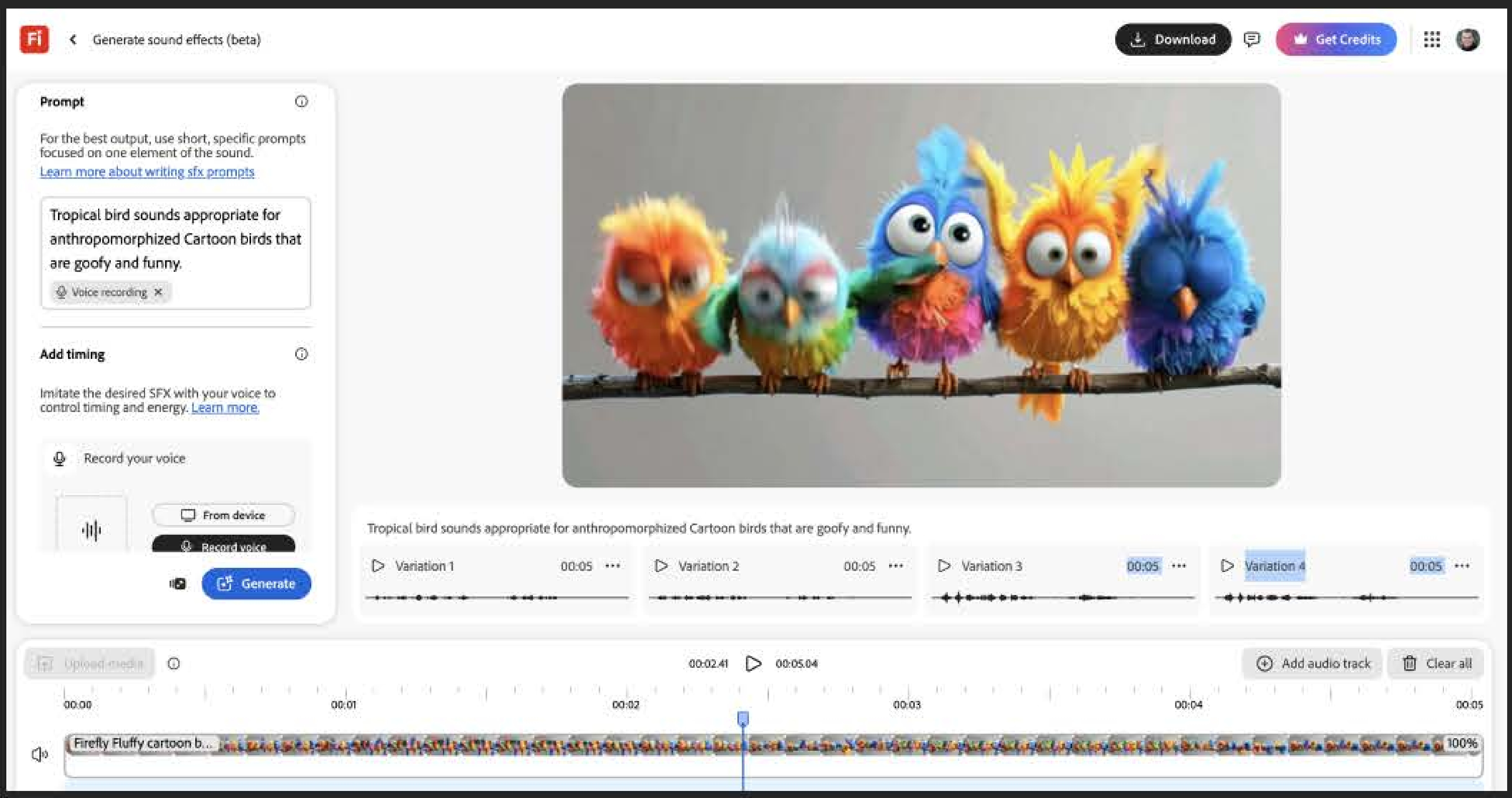


General settings
Model: Ray3
Resolution: 720p
Aspect ratio: Widescreen (16:9)
Frames per second: 24 FPS
Duration: 5 seconds

Some items are hidden when frames are in use, because they don't support frames. To use hidden items, remove all frames.

Prompt
Fluffy cartoon birds with colorful wild feathers sitting on a branch with a different goofy and confused expression. Bright rainbow colors, exaggerated, sketchy style, humorous and chaotic. Gray background with a slight gradient between lighter and darker gray.

Generate sound effects (beta)



Prompt
For the best output, use short, specific prompts focused on one element of the sound.
Learn more about writing sfx prompts

Tropical bird sounds appropriate for anthropomorphized Cartoon birds that are goofy and funny.
Voice recording ✕

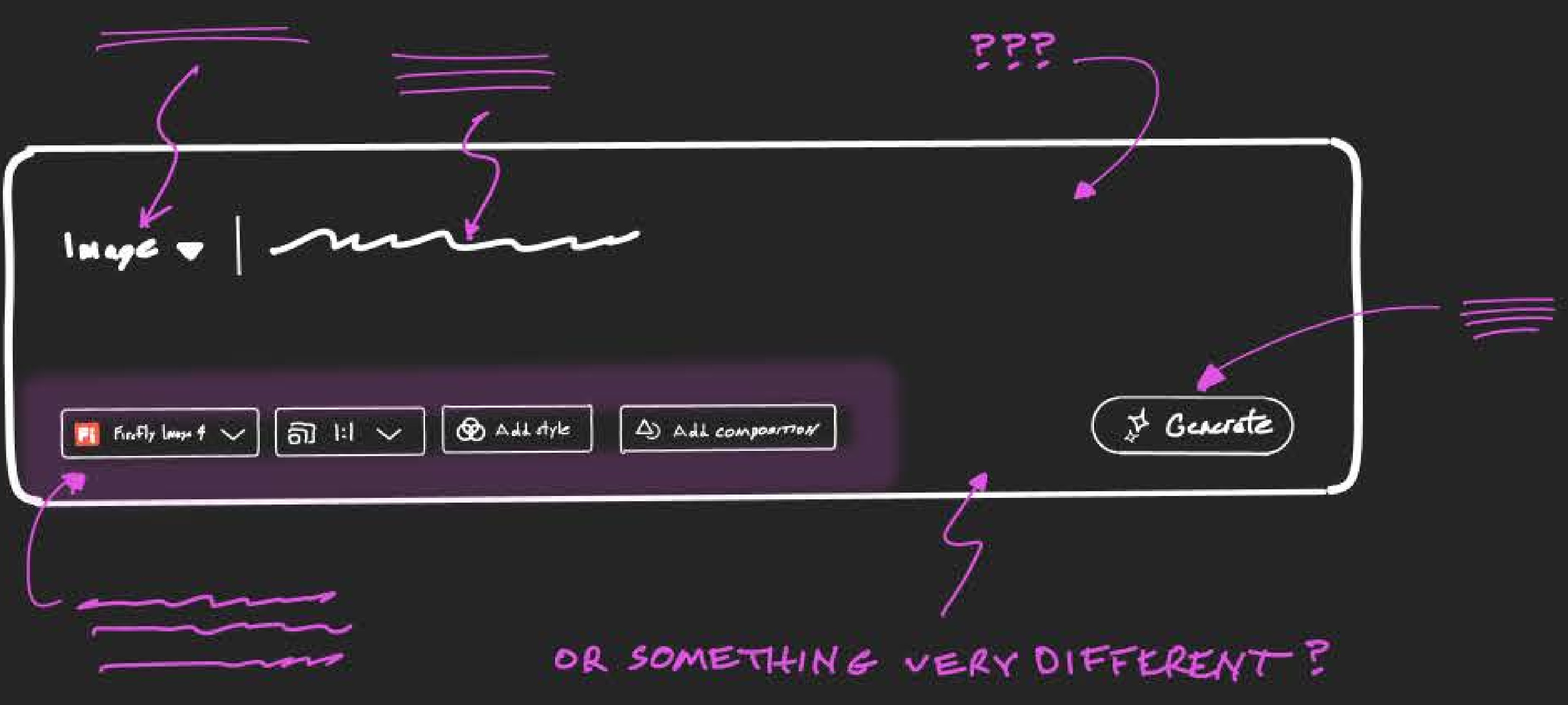
Add timing
Imitate the desired SFX with your voice to control timing and energy. Learn more.
Record your voice

Tropical bird sounds appropriate for anthropomorphized Cartoon birds that are goofy and funny.
Variation 1 00:05
Variation 2 00:05
Variation 3 00:05
Variation 4 00:05

Challenge & requirements

Challenge

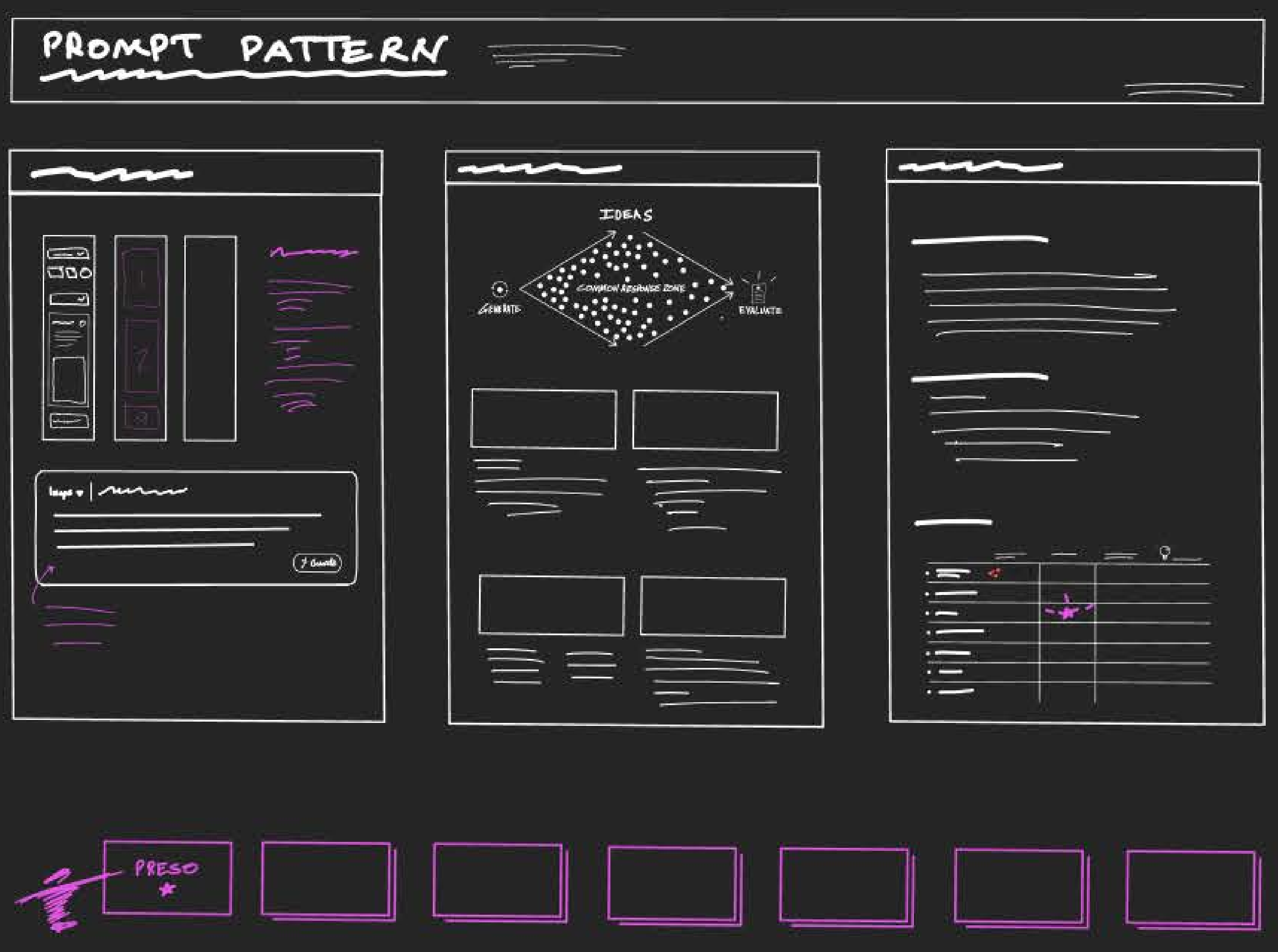
Design a Firefly prompting pattern that defines a conceptual blueprint for use across Text to image, Text to video, and Generate sound effects (beta) workflows, then express it in two forms: annotated hand-drawn sketches (digital or analog) and representative Figma component(s).



Requirements (3 parts)

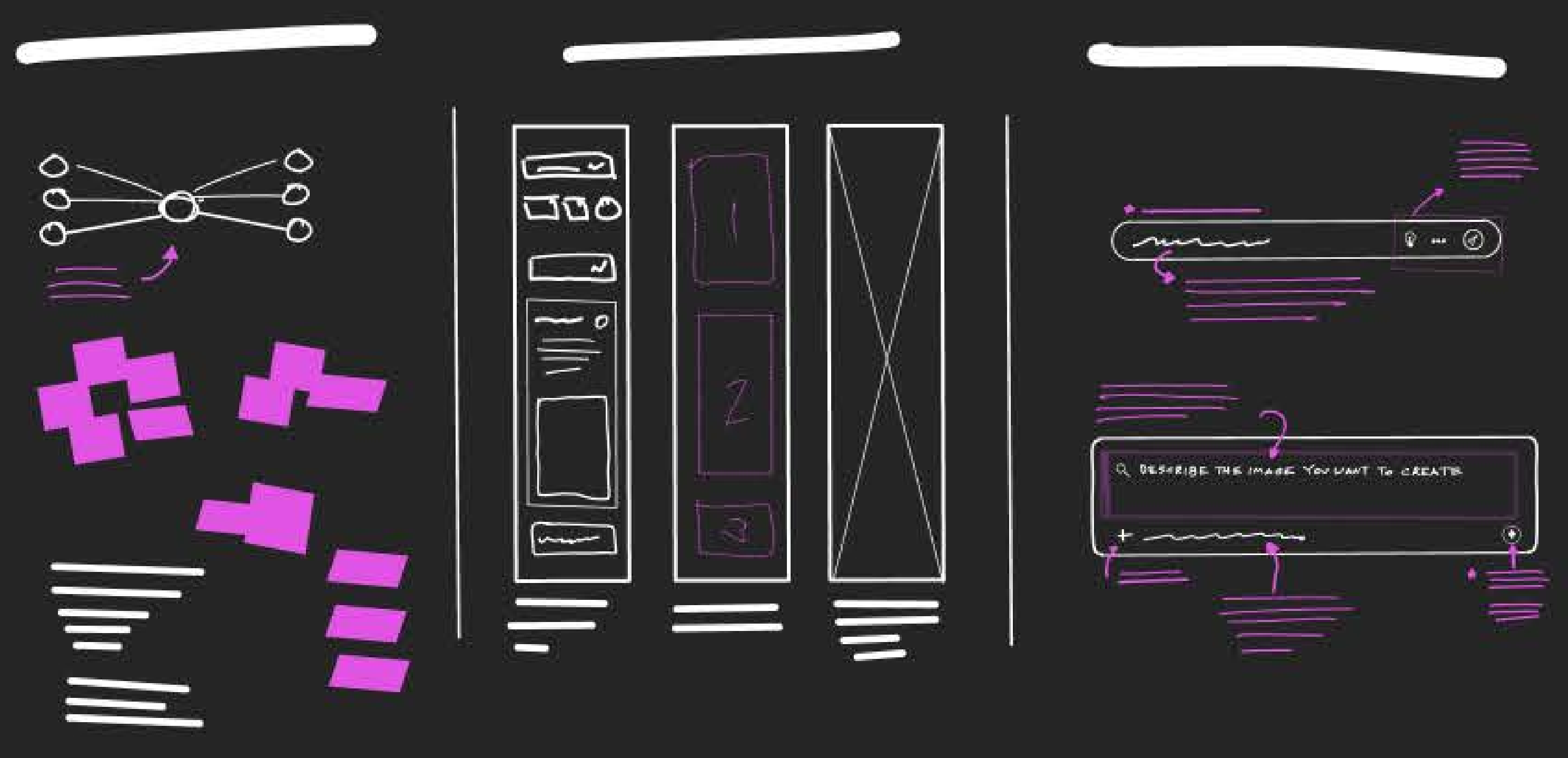
1. **Conceptual pattern (blueprint)**

- Document a prompting pattern that is flexible enough to coherently work across different media types and workflows - particularly Text to image, Text to video, and Generate sound effects. Define the key objects relationships, calls to action, and attributes that make up the pattern.
- Demonstrate understanding of the definitions and nuance mentioned previous by explicitly stating how they are incorporated in your design.



2. **Sketch instantiation**

- Hand-drawn sketches and annotations that demonstrate your:
  - Learning and research
  - Design explorations
  - Details and nuances of your design
- This serves as the first tangible representation of the blueprint.



3. **Figma instantiation**

- Working Figma component(s) that demonstrate the conceptual pattern.
- Shows how the blueprint translates into a usable design system asset.

YOUR ACTUAL

Figma

COMPONENT(S)

All this results in a succinct hierarchy: **Conceptual idea → Sketch→ Figma component**

Questions to consider

What are the **key elements** of a prompting experience?

What **attributes and calls to action** are most important. And **how do you prioritize** them in the interface?

What flexes, and why? For instance can/should the prompting experiences change depending on media type, Ai Model, or other contextual factors (input type, screen size, etc..., etc...).

Minimal → Complex: Show how **the pattern can scale** from a very simple prompt experience (just text + generate button) to a richer prompt with style references, advanced attributes, or presets.

Consistency vs. Flexibility: Too much consistency = boring or limiting. Too much flexibility = chaos. Where's the sweet spot?

How do you decide what belongs in an affordance such a "prompt bar" vs. a properties panel or similar?

How do you help a beginner feel comfortable while still affording more advanced users power and control?

Final thought

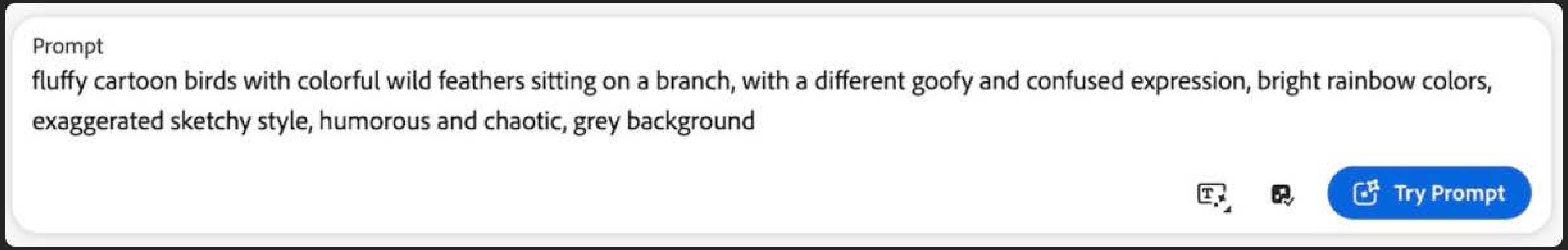
Multi-modal prompting—guiding AI models with combinations of text, images, audio, or video—is emerging as a shared language of creative AI.

At Adobe, we believe designers should help shape that language so it stays approachable, empowering, and coherent across tools.

That means thinking not just about individual prompts, but about the system of interactions that tie them together.

I'm excited to see how you explore this challenge, what you learn, and how you design the future of prompting.

-Troy



Prompt

fluffy cartoon birds with colorful wild feathers sitting on a branch, with a different goofy and confused expression, bright rainbow colors, exaggerated sketchy style, humorous and chaotic, grey background