

AI & Machine Learning

Use AI to build AI: Save time on prompt design with AI-powered prompt writing

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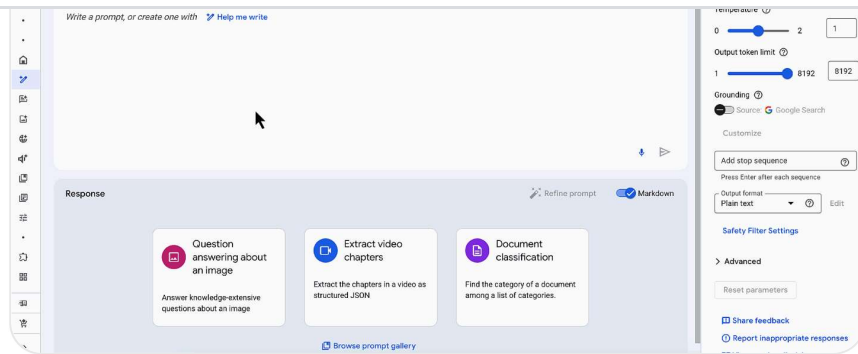
Crafting the perfect prompt for generative AI models can be an art in itself. The difference between a useful and a generic AI response can sometimes be a well-crafted prompt. But, getting there often requires time-consuming tweaking, iteration, and a learning curve. That's why we're thrilled to announce new updates to the [AI-powered prompt writing tools](#) in Vertex AI, designed to make prompting easier and more accessible for all developers.

[Generate prompt](#) and [Refine prompt](#).

[Generate prompt](#): From objective to prompt in seconds

Imagine you need a prompt to summarize customer reviews about your latest product. Instead of crafting the prompt yourself, you can simply tell the **Generate prompt** feature your goal. It will then create a comprehensive prompt, including placeholders for the reviews, which you can easily populate with your own data later. **Generate prompt** takes the guesswork out of prompt engineering by:

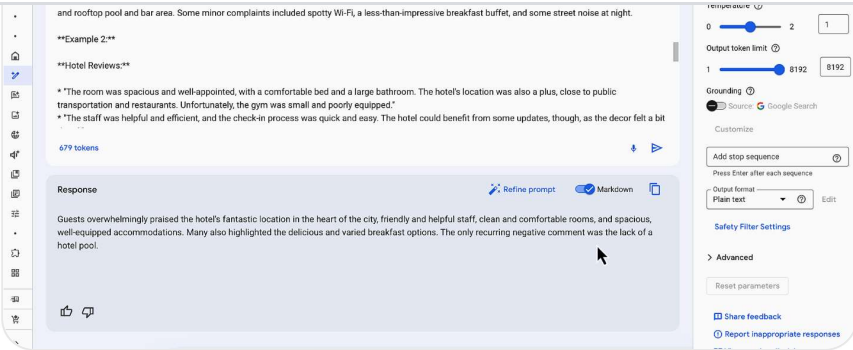
- Turning simple objectives into tailor-made, effective prompts. This way, you don't need to agonize over phrasing and keywords.
- Generating placeholders for context, like customer reviews, news articles, or code snippets. This allows you to quickly add your specific data and get immediate results.
- Speeding up the prompt writing process. Focus on your core tasks, not on perfecting prompt syntax.



Refine prompt: Iterate and improve with AI-powered suggestions

Once you have a prompt, either crafted by **Generate prompt** or one you've written yourself, **Refine prompt** helps you modify it for optimal performance. Here's how it works:

1. **Provide feedback:** After running your prompt, simply provide feedback on the response, the same way you would critique a writer.
2. **Instant suggestions:** Vertex AI generates a new, suggested prompt in one step, taking your feedback into account.
3. **Iterate and improve:** You can accept or reject the suggestion and continue iterating by running the refined prompt and providing further feedback.



Prompt refinement boosts the quality of the prompt, while also saving significant times during prompt design. The quality is typically improved by augmenting the prompt instructions in a way that Gemini will better understand.

Below are some sample prompts that were revised with **Refine prompt**:

Original prompts	After using Prompt Refinement
Suggest engaging lesson plan ideas for art class	Suggest 3 engaging lesson plan ideas for a high school art class, each focusing on a different art form. Be concise and only include the most relevant information, such as the art form, target age group, and key activity.
Plan a schedule for a	Create a detailed weekly schedule for a team with a 6-

and meeting time. Take in account that there are 2 teams with 6 hour delay

- Specific time blocks for focus time and meetings.
- Consideration of overlapping work hours to ensure effective communication and collaboration.
- A balance of individual work and team interactions.
- Suggestions for time zone conversion tools or strategies to facilitate scheduling.

A powerful duo: Generate prompt meets Refine prompt

These two features work in tandem to help you craft the most effective prompt for your objective – irrespective of your skill level. **Generate prompt** gets you started quickly, while **Refine prompt** allows for iterative improvement in five steps:

1. **Define** your objective: Tell **Generate prompt** what you want to achieve.

placeholders for context.

3. **Run** the prompt and review the output: Execute the prompt with your chosen LLM in Vertex AI.
4. **Refine** with feedback: Use **Refine prompt** to provide feedback on the output and receive AI-powered suggestions for prompt improvement.
5. **Iterate** until ideal performance: Continue refining and rerunning your prompt until you achieve your desired results.

How to get started

Go ahead and try out an AI-assisted prompt-writing through our interactive critiquing workflow. Vertex AI's easy-to-use UI for refining prompts can be tested without setting up a Google Cloud account through [this link](#) (to demo without a Google Cloud account, be sure you are logged out of your Google account in your web browser or use incognito mode). For those with an account, you'll have the ability to save, manage, and fine-tune your prompts.

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