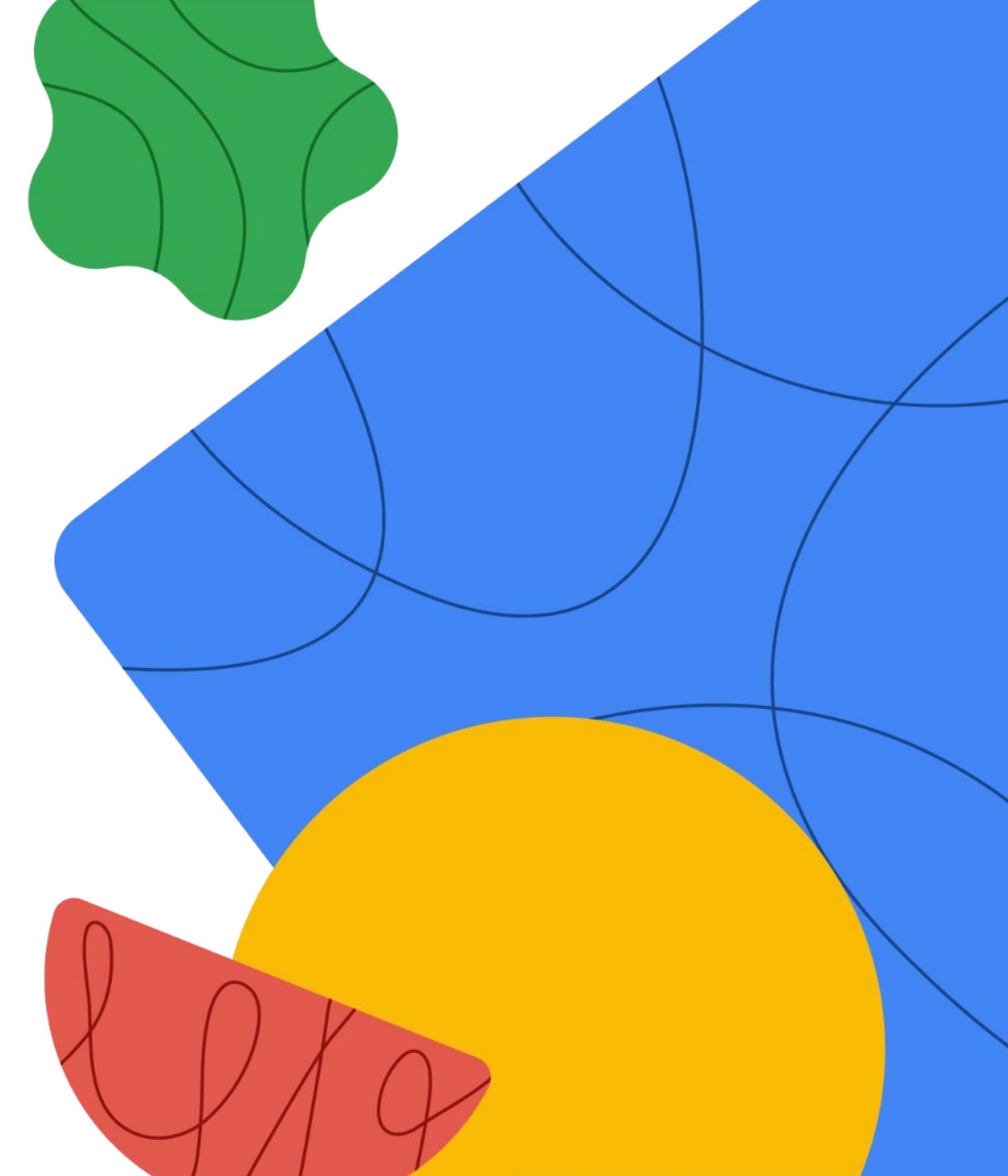


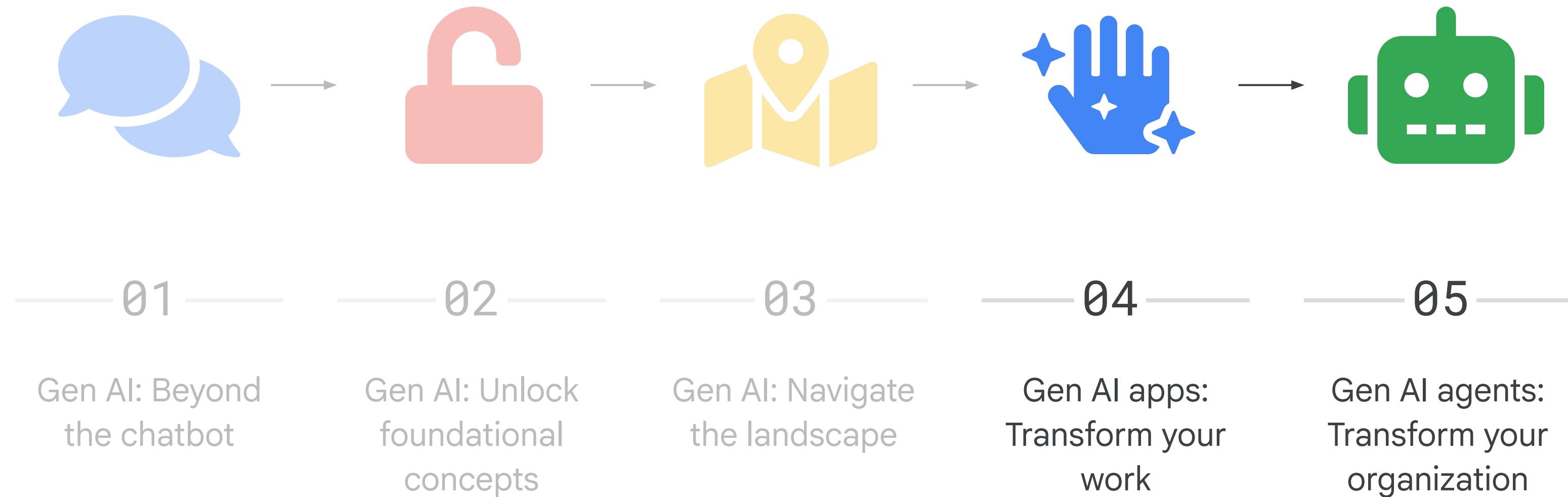
# Module 04

## Gen AI apps:

### Transform your work



# Generative AI Leader learning path



# Module objectives

01

Explain prompt engineering techniques for better results.

02

Develop automated workflows with gen AI templates and tools.

03

Describe core functionality and business value of Google Workspace with Gemini.

04

Describe core functionality and business value of Gemini for Google Cloud.



# Agenda



- 
- 01** Prompting techniques

---

  - 02** Gen AI for productivity

---

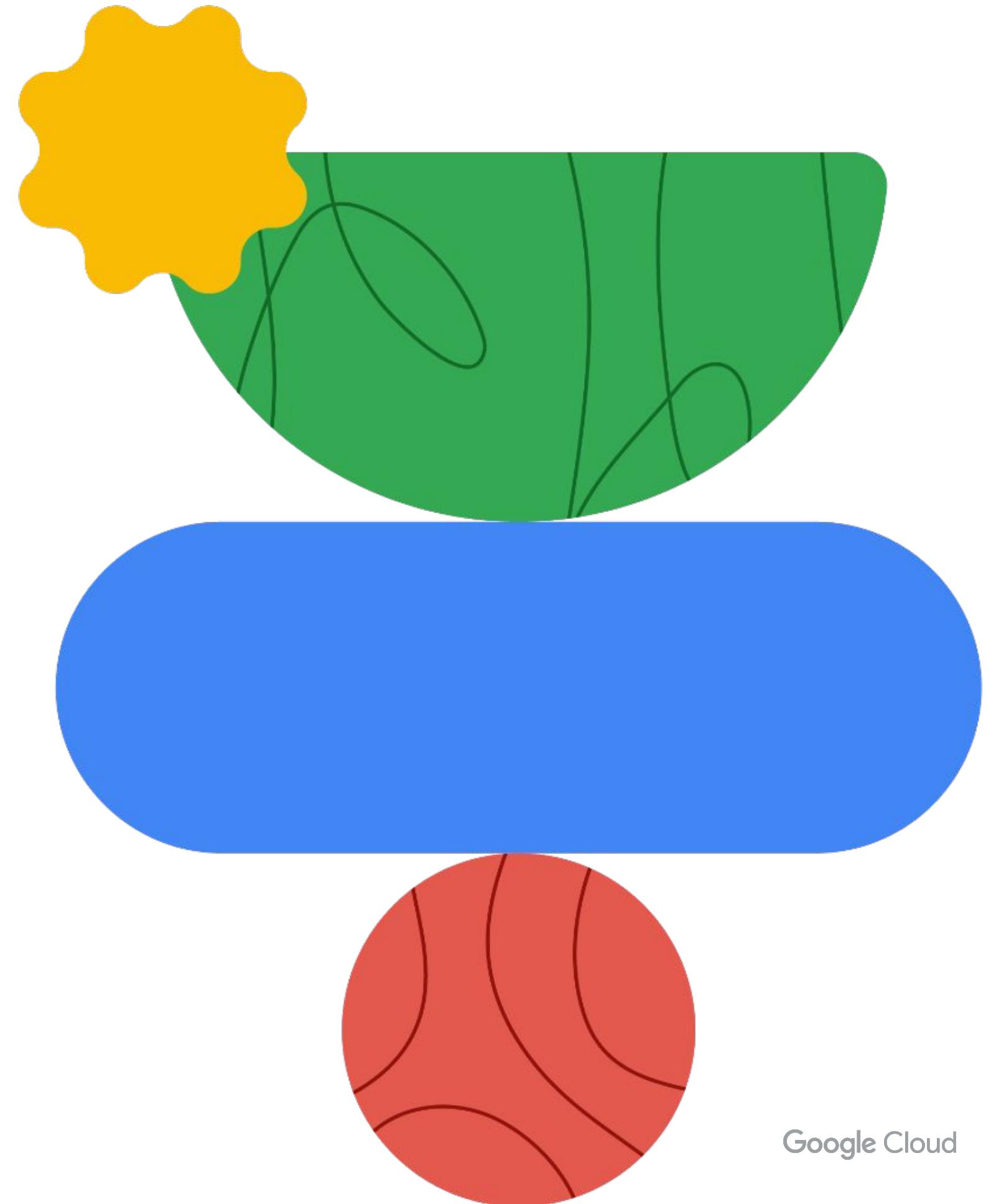
  - 03** Gemini for Google Cloud
-



01

# Prompting techniques

# One-, zero- and few-shot prompting



# Prompting approaches

## Zero-shot prompting

---

Asking a foundation model to complete a task with no examples.

## One-shot prompting

---

## Few-shot prompting

---

# Prompting approaches

## Zero-shot prompting

---

Asking a foundation model to complete a task with no examples.

## One-shot prompting

---

Showing the foundation model one example, then allowing it to learn and apply that knowledge.

## Few-shot prompting

---

# Prompting approaches

## Zero-shot prompting

---

Asking a foundation model to complete a task with no examples.

## One-shot prompting

---

Showing the foundation model one example, then allowing it to learn and apply that knowledge.

## Few-shot prompting

---

Providing the foundation model with multiple examples to learn from.

# Prompting approaches: Online clothing store example

- Zero-shot prompting
- One-shot prompting
- Few-shot prompting

# Prompting approaches: Online clothing store example



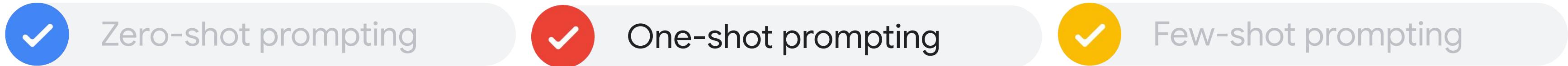
## Input

[Customer query: "What is Cymbal Retail's returns policy?"](#)

## Output

The LLM, drawing on its vast knowledge base, understands the question and provides a response, even though it hasn't received specific training on your company's policies.

# Prompting approaches: Online clothing store example



## Input

You prompt with a single example of a customer inquiry, such as a question about shipping times, along with the prompt, question, or query.

**Customer query:** "How long will it take for my order to arrive?"

**Example:** "Standard shipping typically takes 3-5 business days. Expedited options are available at checkout."

## Output

The output follows this example and accurately tags similar customer questions.

# Prompting approaches: Online clothing store example



## Input

You prompt with a few examples of customer inquiries and effective responses.

Customer query: "How long will it take for my order to arrive?"

Example: "Standard shipping typically takes 3-5 business days. Expedited options are available at checkout."

Customer query: "Can I return an item if I don't like it?"

Example: "Yes, we offer a 30-day return policy for unworn items with tags attached. Please see our full return policy on our website."

## Output

The output follows these examples and accurately tags similar customer questions.

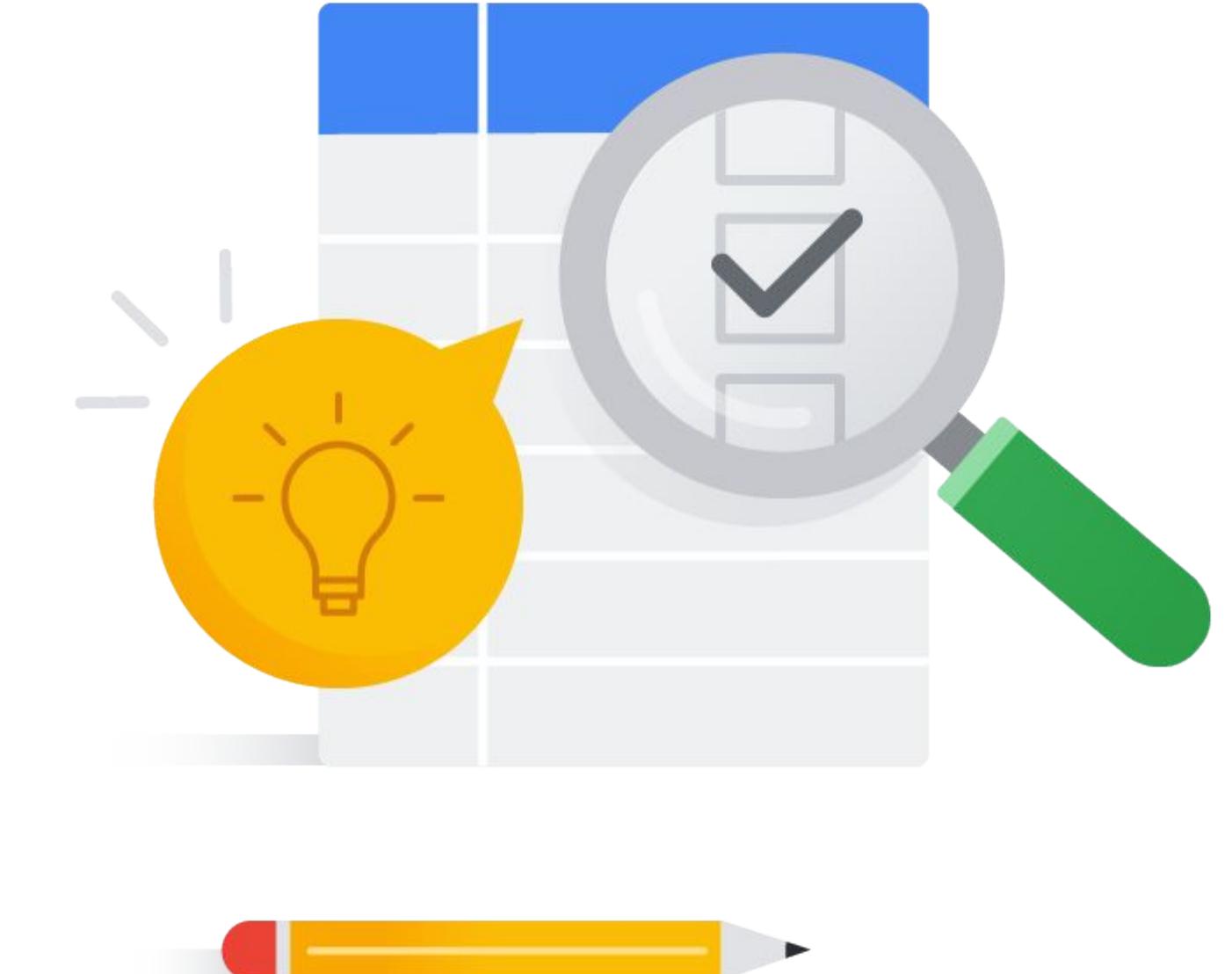
# Demo and discussion: Customer service

⌚ 5 min

👥 Group

1. Demo of one- and few-shot prompting
2. How does the number of examples influence the prompt and Gemini's potential response?

What are the advantages and disadvantages of each prompting technique in this scenario?



# Demo and discussion: Customer service

## Zero-shot

**Prompt:** Write a helpful and empathetic response to a customer complaining about a delayed shipment.

## Few-shot

**Example 1 (input):** "Customer: My order #ABC123 was supposed to arrive on the 25th, but it's now the 28th and I haven't received it. This is causing me a lot of inconvenience."

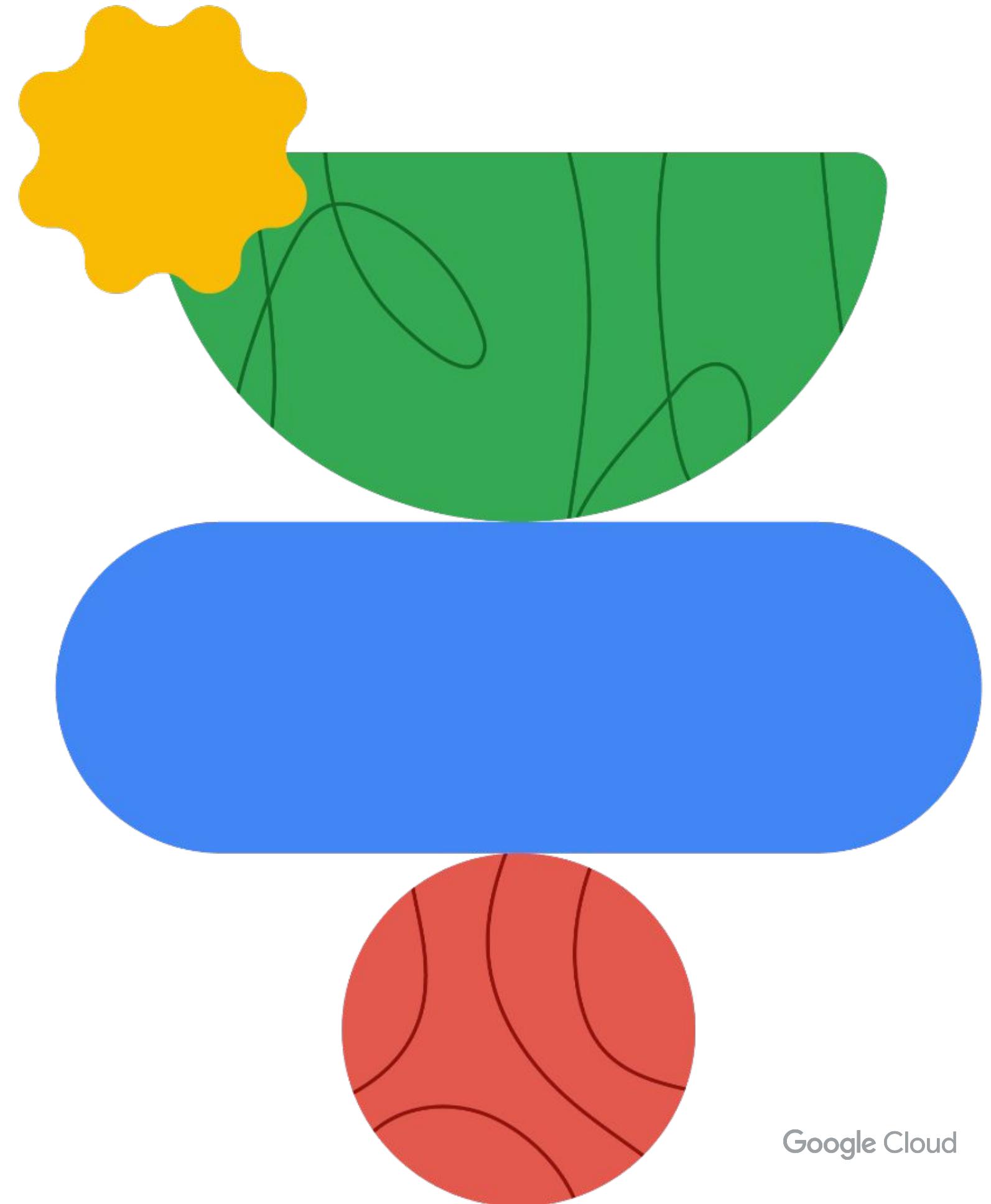
**Example 1 (output):** "Dear [customer name], I sincerely apologize for the delay in the delivery of your order #ABC123. I understand how frustrating this must be. Let me immediately look into the status and provide you with an update within the next hour. In the meantime, please accept our apologies for any inconvenience caused."

**Example 2 (input):** "Customer: I'm really disappointed that my package hasn't arrived yet. I needed it for an important event."

**Example 2 (output):** "Dear [customer name], I am so sorry to hear that your order hasn't arrived as expected, especially since you needed it for an important event. I'm going to investigate this urgently and see what we can do to expedite the delivery or find a suitable solution for you. I'll be in touch shortly with more information."

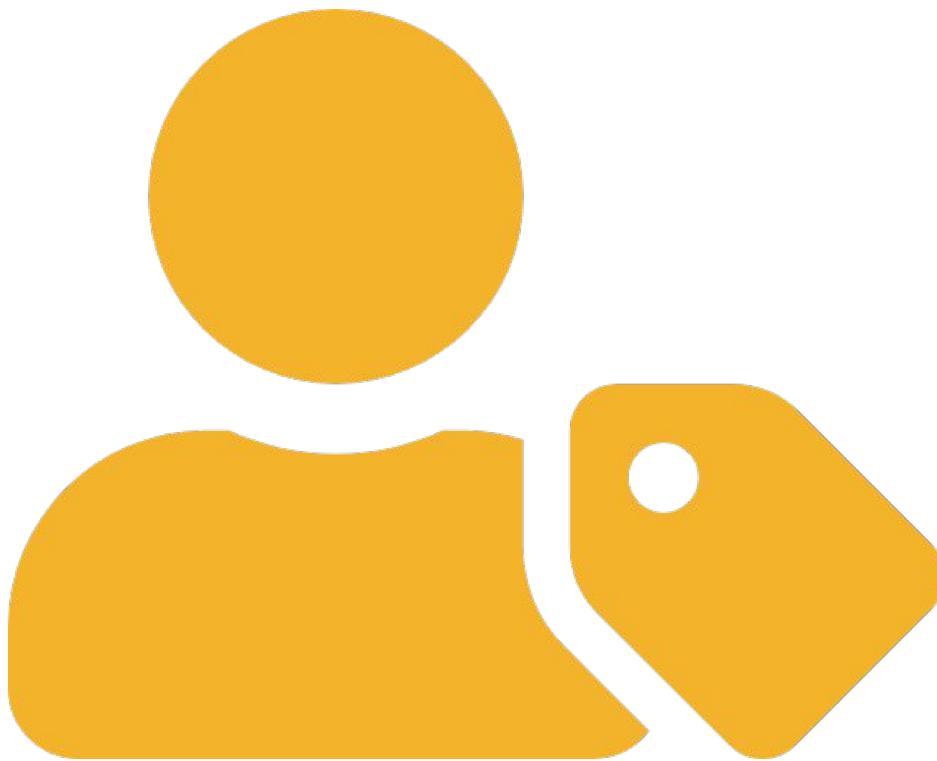
**New prompt:** "Based on these examples, write a helpful and empathetic response to a customer whose order #XYZ456 is now three days late. They are asking for an update."

# Role prompting



# Role prompting

- A technique used to guide the behavior of LLMs by assigning them a specific role or persona.
- It enables you to influence the style, tone, and focus of responses.



# Role prompting: Example 1

## Prompt

You are a customer service agent for a telecommunications company with ten years of experience. A customer is inquiring about their latest bill, which is higher than expected.



# Role prompting: Example 1

## Prompt

You are a customer service agent for a telecommunications company with ten years of experience. A customer is inquiring about their latest bill, which is higher than expected.



## LLM output

The LLM can adopt a helpful and patient tone, explaining potential reasons for the higher bill, offering solutions, and providing information about the company's policies in a clear and concise manner.

# Role prompting: Example 2

## Prompt

You are a marketing copywriter for a new line of athletic wear. Write a product description for a pair of running shoes emphasizing their comfort and performance-enhancing features.



# Role prompting: Example 2

## Prompt

You are a marketing copywriter for a new line of athletic wear. Write a product description for a pair of running shoes emphasizing their comfort and performance-enhancing features.



## LLM output

The LLM may generate persuasive and engaging copy highlighting the key benefits of the shoes, using language that appeals to your target audience.

It might even craft compelling narratives or tap into emotions that resonate with the target audience, making the product more memorable.

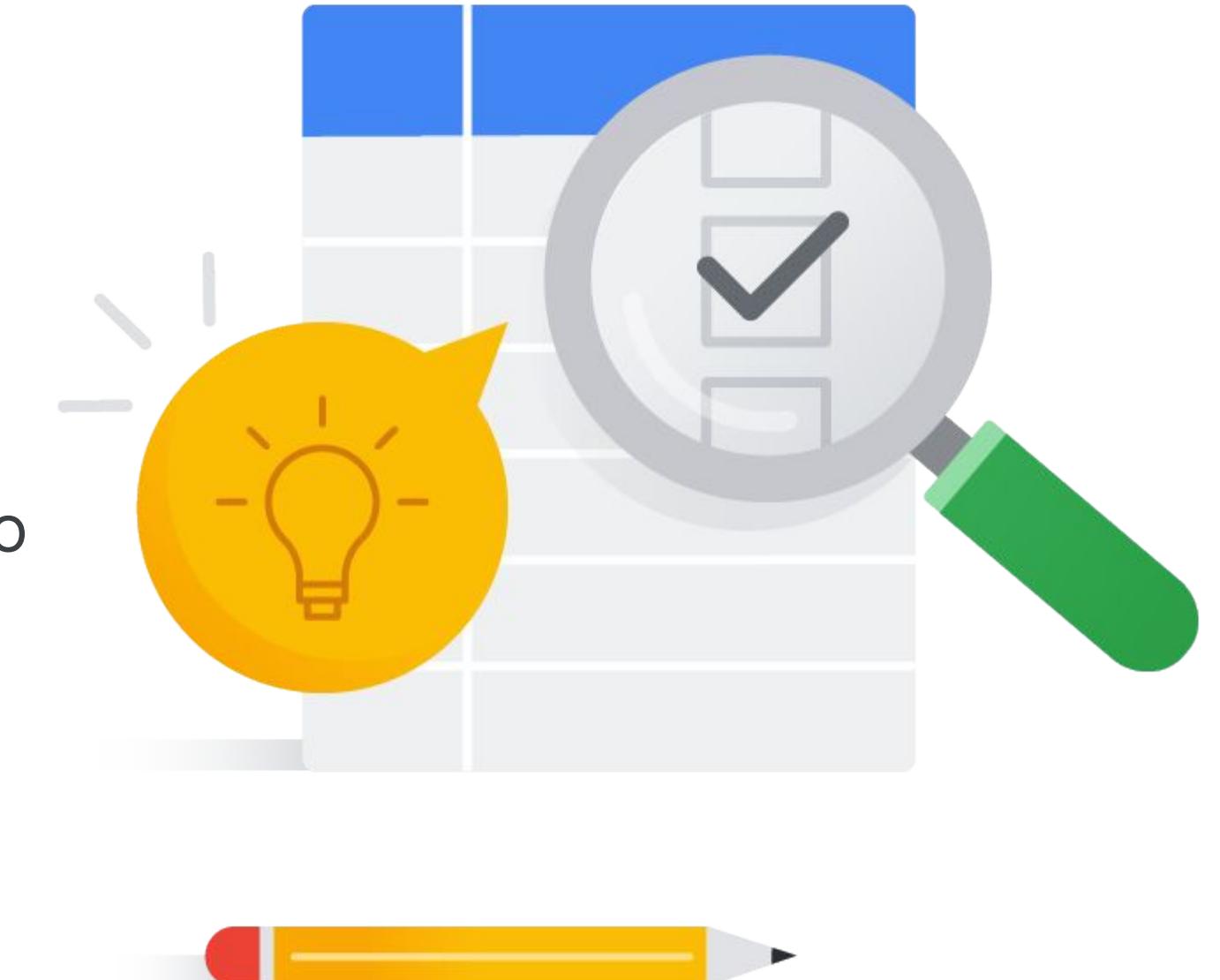
# Try it: Step into the role

⌚ 10 min

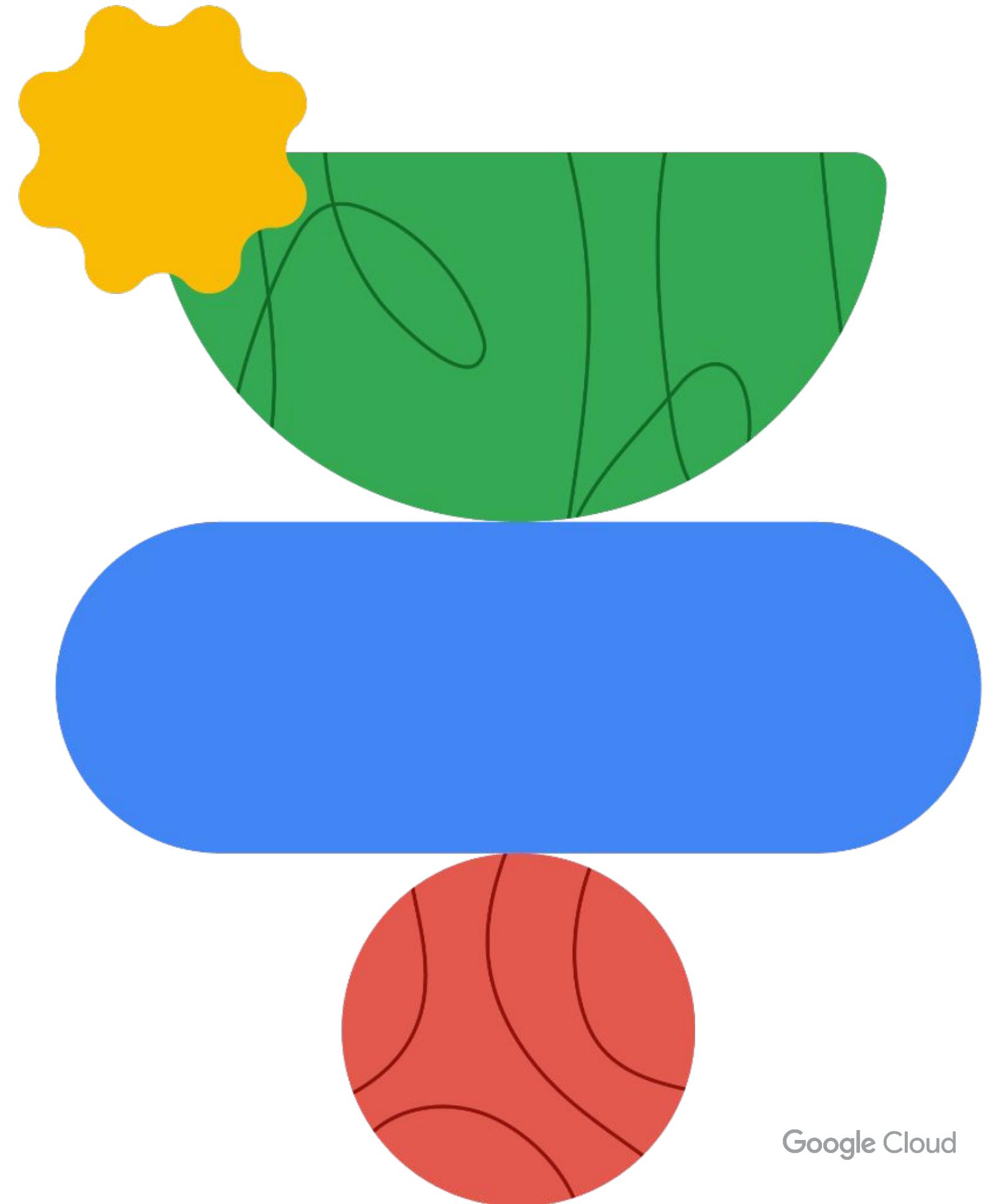
Open the Gemini app: [gemini.google.com](https://gemini.google.com)

1. Select a role or persona that interests you or is relevant to what you want to ask.
2. Fill in the blanks to create your role prompting prompt:

**You are a [persona]. Please write a [fill in the blank].**



# Prompt chaining



# Prompt chaining

Like having a conversation with the AI where each response builds upon the previous one, leading to a more sophisticated and refined outcome.

Continue chats in Gemini without repeating history. Use the same thread. Name and pin chats for easy access.



# Prompt chaining: Process

- 1 Set a goal
- 2 Start the chain
- 3 Build the chain
- 4 Observe and analyze



# Prompt chaining: Process

- 1** Set a goal  
Think of a multi-step task or a complex question that you'd like Gemini to help you with.
  - Writing a detailed business proposal.
  - Planning a business trip itinerary.
  - Creating an image with various elements for a marketing campaign.
- 2** Start the chain
- 3** Build the chain
- 4** Observe and analyze

# Prompt chaining: Process

- 1** Set a goal  
Begin with an initial prompt that sets the stage for your goal.  
"I need to plan a 5-day business trip to Tokyo in August. My primary goal is to meet with clients and attend the Google Cloud Next Tokyo conference. I'd also like to explore some key landmarks if time allows. Can you help me create a preliminary itinerary?"
- 2** Start the chain
- 3** Build the chain
- 4** Observe and analyze

# Prompt chaining: Process

- 1** Set a goal  
Based on Gemini's response, ask follow-up questions or provide additional instructions to refine the output.
- 2** Start the chain  
"Can you suggest some suitable hotels near the conference center that offer business traveler amenities?"
- 3** Build the chain  
"Can you also add some day trips to nearby cities?"
- 4** Observe and analyze

# Prompt chaining: Process

- 1 Set a goal
- 2 Start the chain
- 3 Build the chain
- 4 Observe and analyze

Pay attention to how each prompt builds upon the previous one, leading to a more comprehensive and nuanced result.

# Prompt chaining scenario



Marketing manager's prompt



Gemini's output

# Prompt chaining scenario



Marketing manager's **first prompt**

I'm launching a new line of organic skincare products focused on anti-aging. My target audience is women aged 35-55 who are interested in natural beauty solutions. Give me some ideas for a marketing campaign.



Gemini's output

Of course! Below, you can find a list with several campaign ideas, including social media strategies, influencer collaborations, and content marketing suggestions:  
[...]

# Prompt chaining scenario (continued)



Marketing manager's **next prompt**

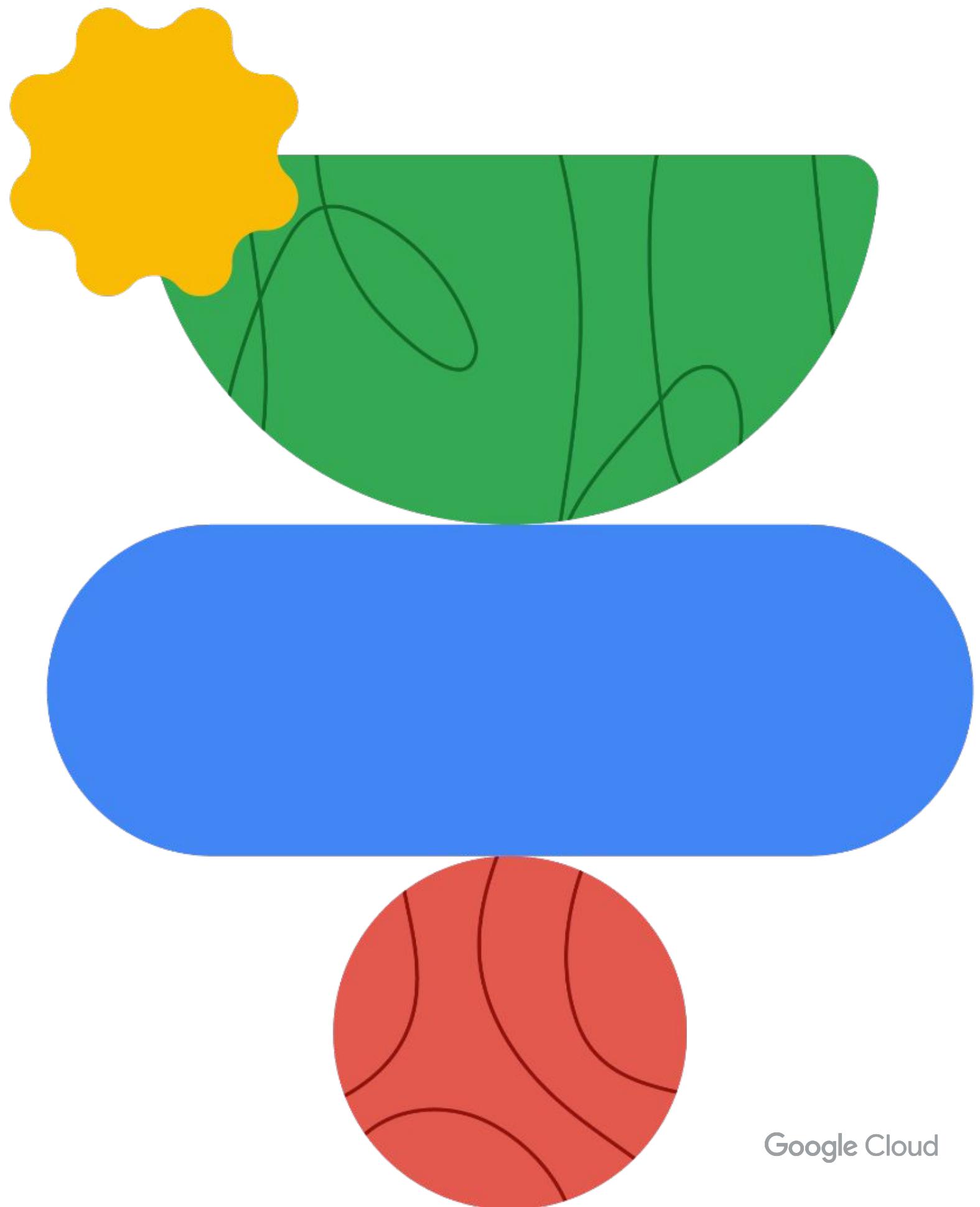
Okay, let's focus on the content marketing strategy. Develop a content calendar for the next three months with blog post topics, social media post ideas, and potential email newsletter themes.



Gemini's output

Here's a detailed content calendar breakdown aligned with your target audience and campaign goals (organic skincare, anti-aging, women 35-55): [...]

# Reusing prompts



Google Cloud

# Reusing prompts: Samples

 Marketing manager

 Content writer

 Customer support

 Software developer

# Reusing prompts: Samples



Marketing manager



Content writer



Customer support



Software developer

"Write a catchy social media post for [platform] promoting our new [product/service]. Highlight [key features/benefits] and include a call to action to [desired action]."

# Reusing prompts: Samples

-  Marketing manager
  -  Content writer
  -  Customer support
  -  Software developer
- "Write a [content type: blog post, article, script] about [topic]. The target audience is [audience description]. The tone should be [tone: informative, humorous, persuasive]. Include [keywords]."

# Reusing prompts: Samples



Marketing manager



Content writer



Customer support



Software developer

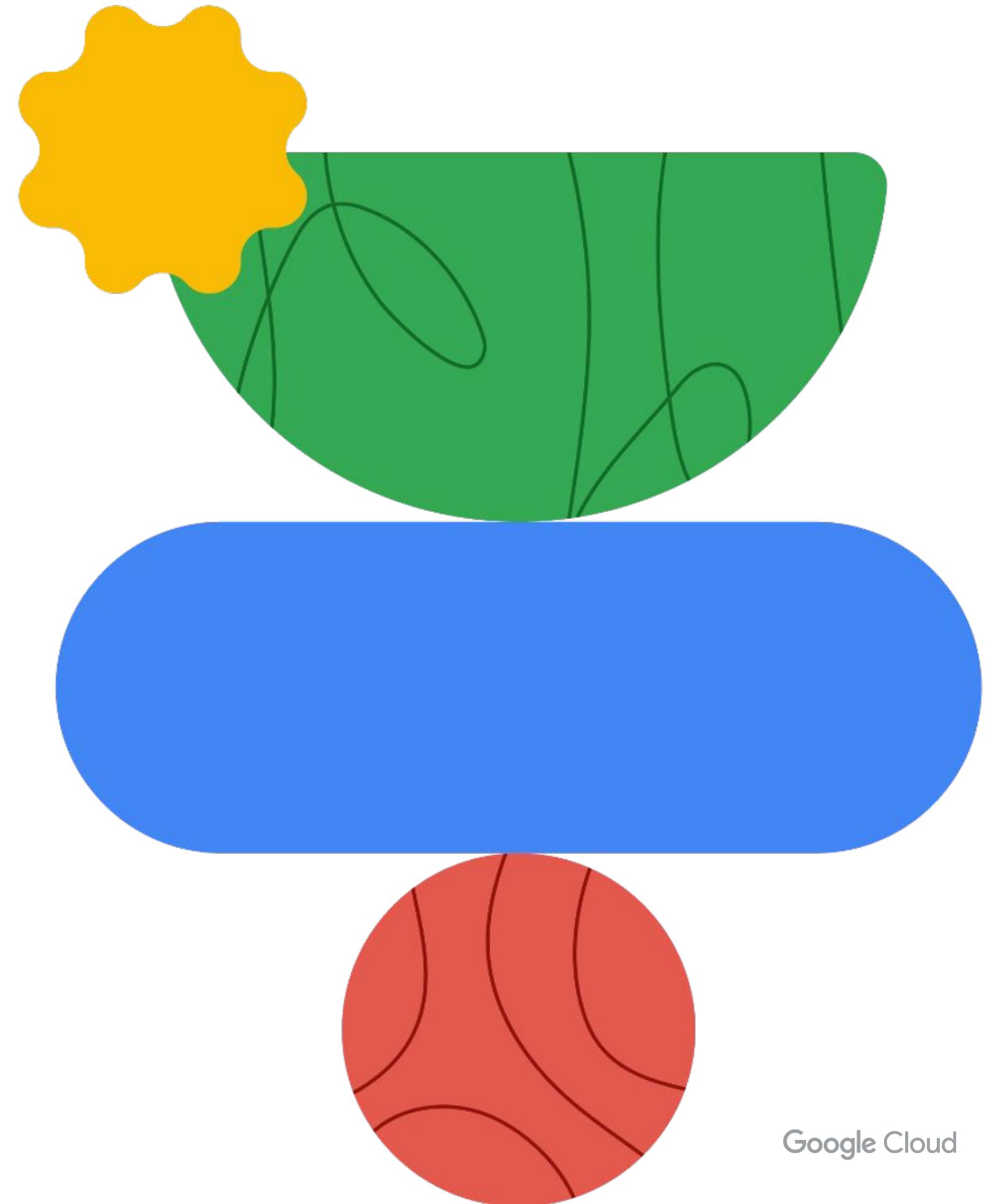
"Respond to this customer email: [paste email content]. Be empathetic and address their concerns about [issue]. Offer a solution that aligns with our [company policy]."

# Reusing prompts: Samples

-  Marketing manager
-  Content writer

"Write Python code to [task]. Use [libraries/frameworks] and follow [coding style guidelines]."
-  Customer support
-  Software developer

# Grounding



Google Cloud

Grounding refers to the **ability of the AI model** to connect its output to verifiable and specific sources of information.

# Retrieval-augmented generation (RAG)

01

## Retrieving relevant information

The AI model retrieves relevant information from a vast knowledge base.

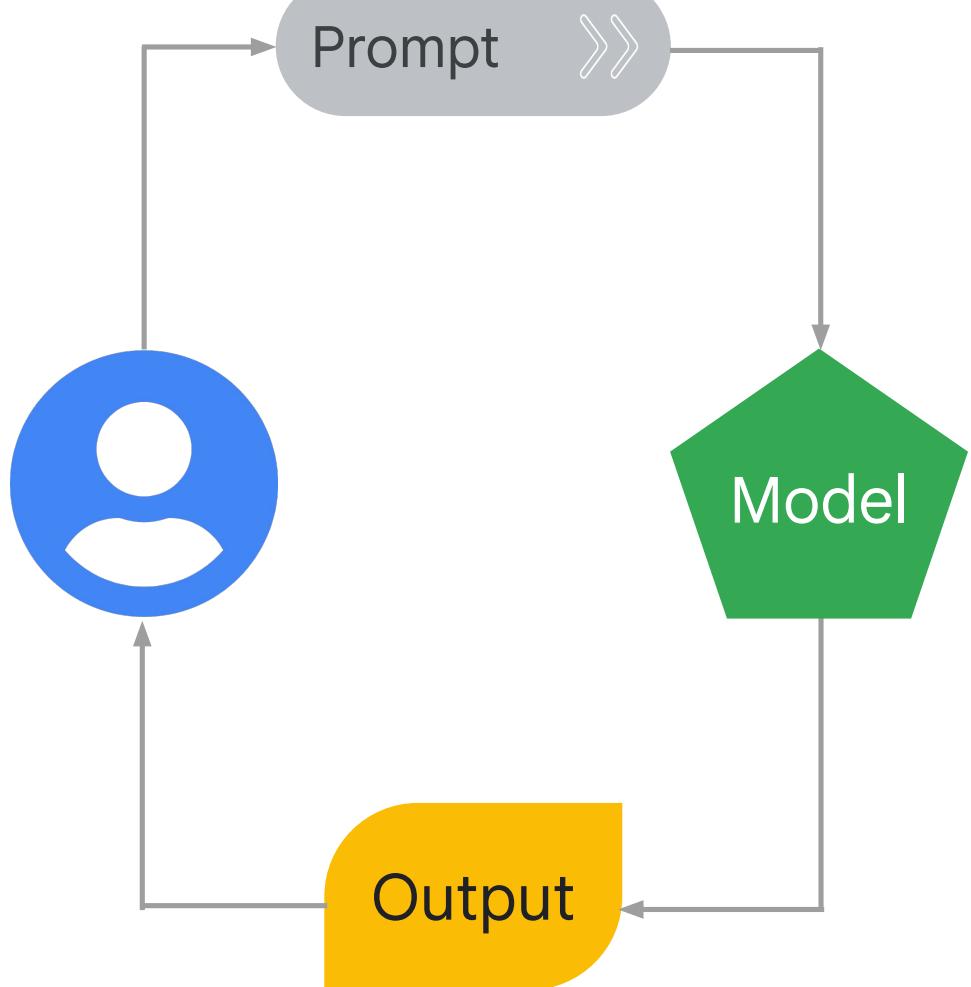
02

## Generating output

The model uses this retrieved information to generate the final output.

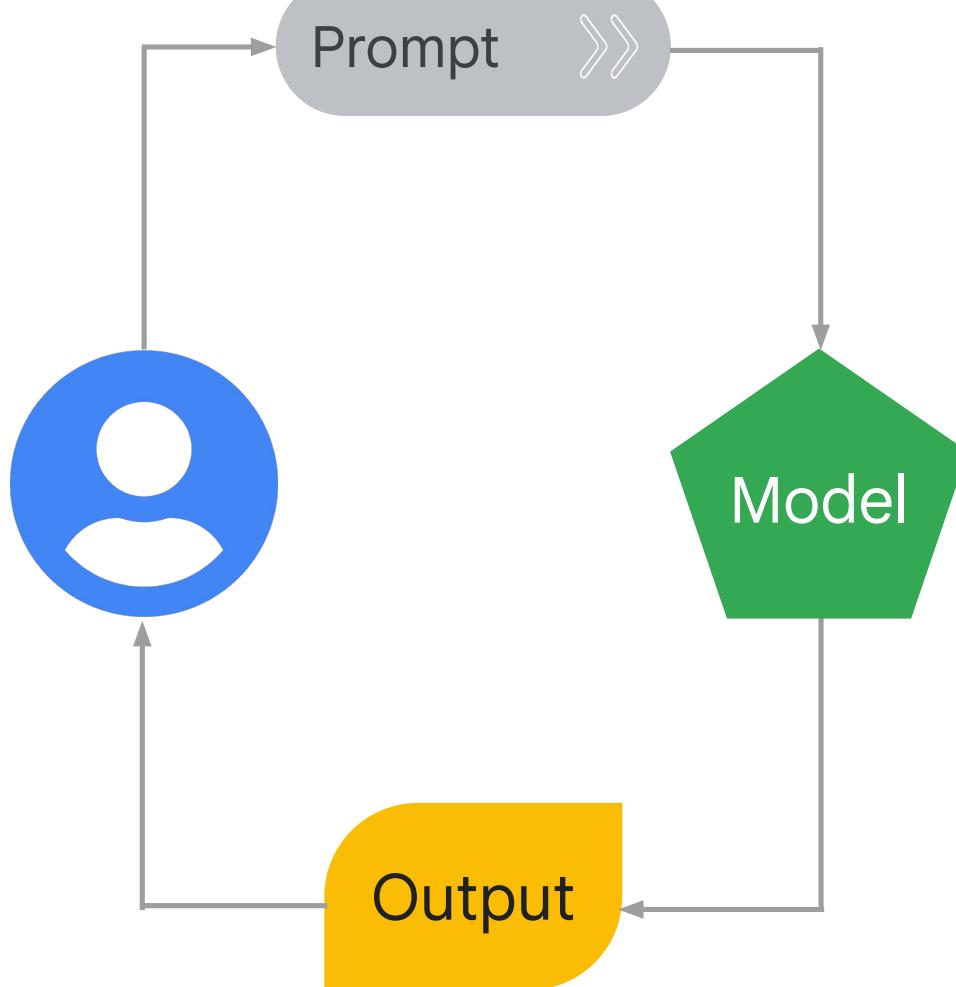
# Retrieval-augmented generation (RAG)

## Model only (without RAG)

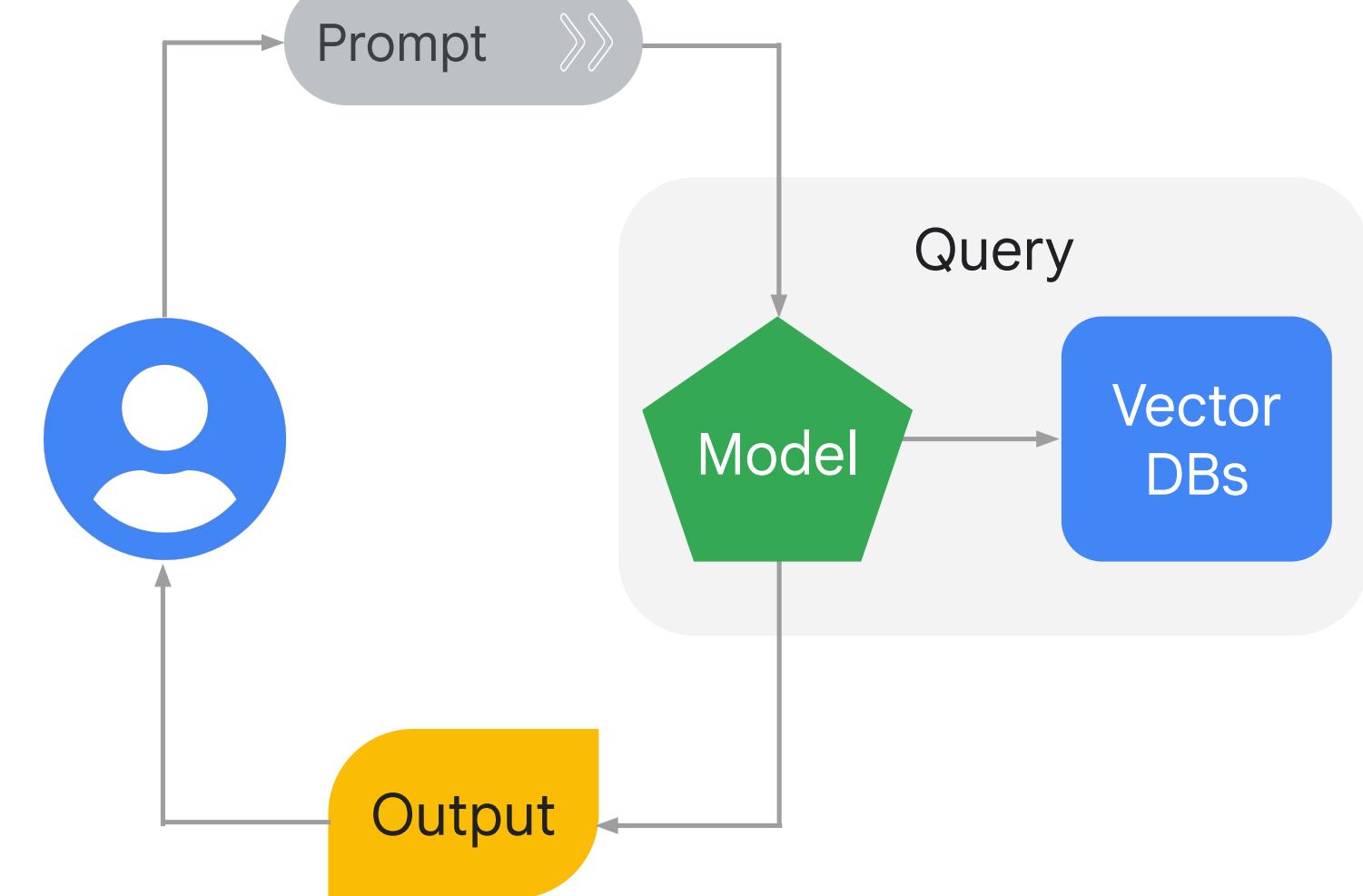


# Retrieval-augmented generation (RAG)

**Model only (without RAG)**



**Model with RAG**



# Benefits of RAG

## Improved accuracy and relevance

Produces more accurate  
and informative outputs.

## Improved explainability and transparency

## Extending LLM capabilities

# Benefits of RAG

## Improved accuracy and relevance

Produces more accurate  
and informative outputs.

## Improved explainability and transparency

Shows the specific  
sources used to generate  
the output.

## Extending LLM capabilities

# Benefits of RAG

## Improved accuracy and relevance

Produces more accurate  
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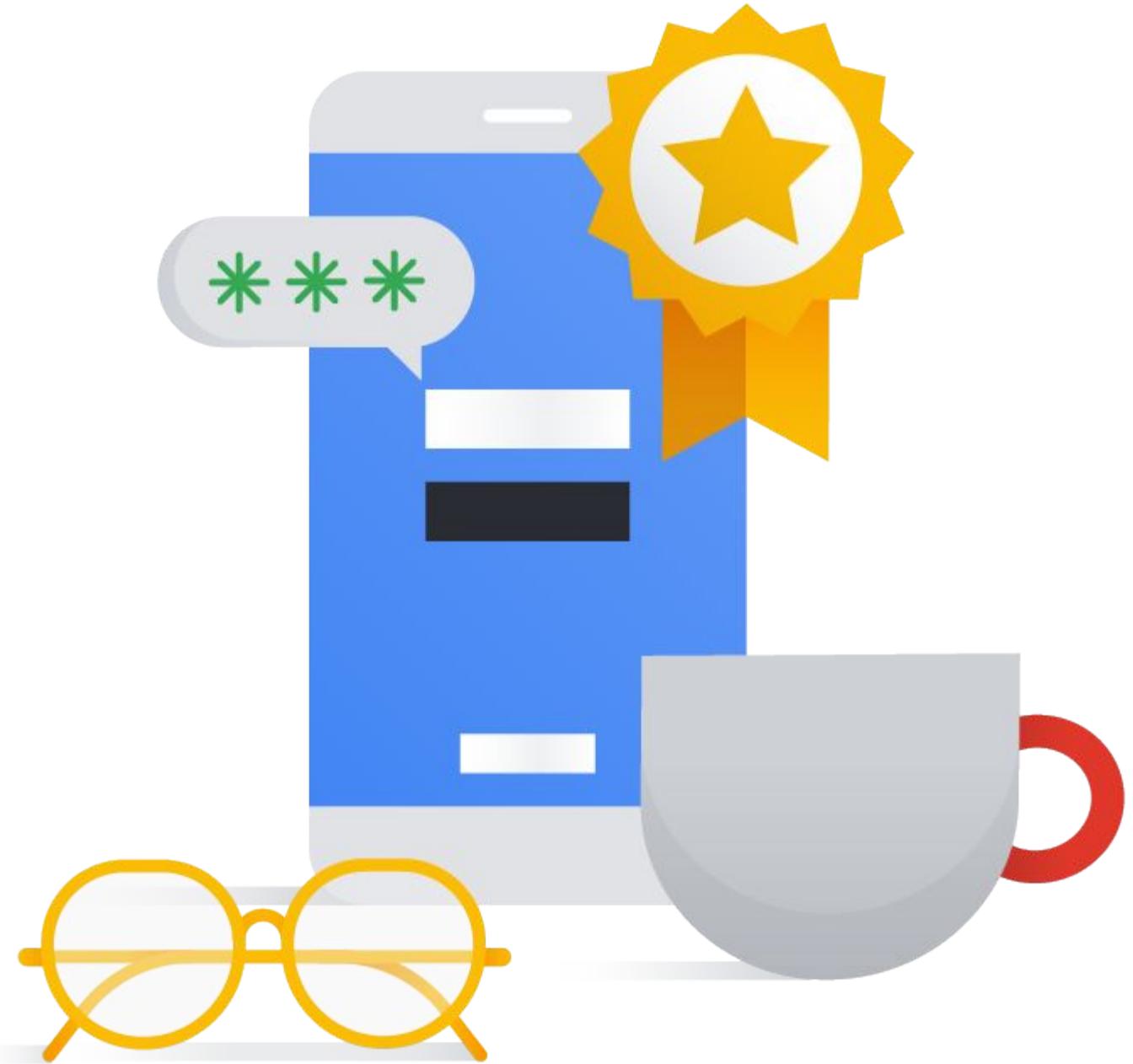
## Improved explainability and transparency

Shows the specific  
sources used to generate  
the output.

## Extending LLM capabilities

Only generates a  
response based on the  
additional context it was  
provided.

Now let's do a short  
quiz to **check your  
knowledge!**



# Quiz | Question 01

## Question

Which prompting technique relies entirely on the foundation model's pre-existing knowledge, without any provided examples?

- A. One-shot prompting
- B. Zero-shot prompting
- C. Few-shot prompting
- D. Multi-shot prompting

# Quiz | Question 01

## Answer

Which prompting technique relies entirely on the foundation model's pre-existing knowledge, without any provided examples?

- A. One-shot prompting
- B. Zero-shot prompting
- C. Few-shot prompting
- D. Multi-shot prompting



# Quiz | Question 02

## Question

You're designing a language learning app and want to incorporate an AI tutor that can provide personalized feedback to students practicing their conversational skills.

Which role-prompt would be most effective in guiding the AI's interactions with students?

- A. "You are a language model built to help students learn a new language."
- B. "You are a helpful and encouraging tutor who provides constructive feedback on language learning exercises."
- C. "Provide personalized feedback to students practicing conversational skills."
- D. "You are a robot programmed to assess language proficiency."

# Quiz | Question 02

## Question

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- D. "You are a robot programmed to assess language proficiency."

# Quiz | Question 03

## Question

What is the primary function of retrieval-augmented generation (RAG) in AI models?

- A. To enhance the AI model's ability to memorize vast amounts of information.
- B. To enable the AI model to access and utilize external knowledge sources for generating outputs.
- C. To restrict the AI model's output to a predefined set of responses.
- D. To replace human intervention in the AI model's output generation process.

# Quiz | Question 03

## Answer

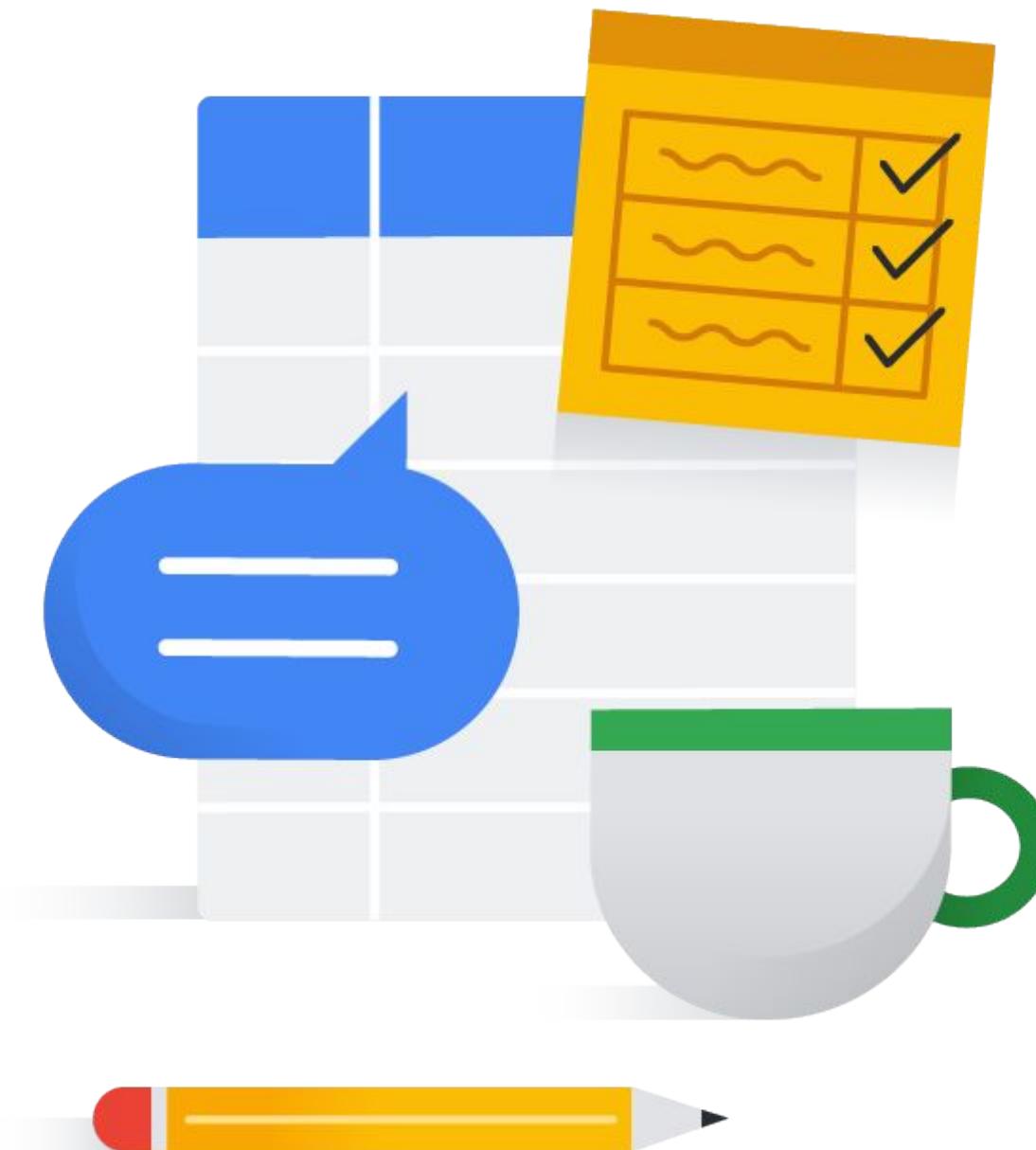
What is the primary function of retrieval-augmented generation (RAG) in AI models?

- A. To enhance the AI model's ability to memorize vast amounts of information.
- B. To enable the AI model to access and utilize external knowledge sources for generating outputs.
- C. To restrict the AI model's output to a predefined set of responses.
- D. To replace human intervention in the AI model's output generation process.



# Key takeaways

- Effective prompting optimizes AI outputs for complex tasks.
- Use role prompting, prompt chaining and clear, reusable prompts for efficient, effective AI interaction.
- RAG lets AI access external data, improving output reliability and insight beyond memorized information.



# Agenda



- 01 Prompting techniques
- 02 Gen AI for productivity
- 03 Gemini for Google Cloud



# Gen AI for productivity

02

# Explore and reflect

As you explore gen AI applications and tools, ask the following questions.

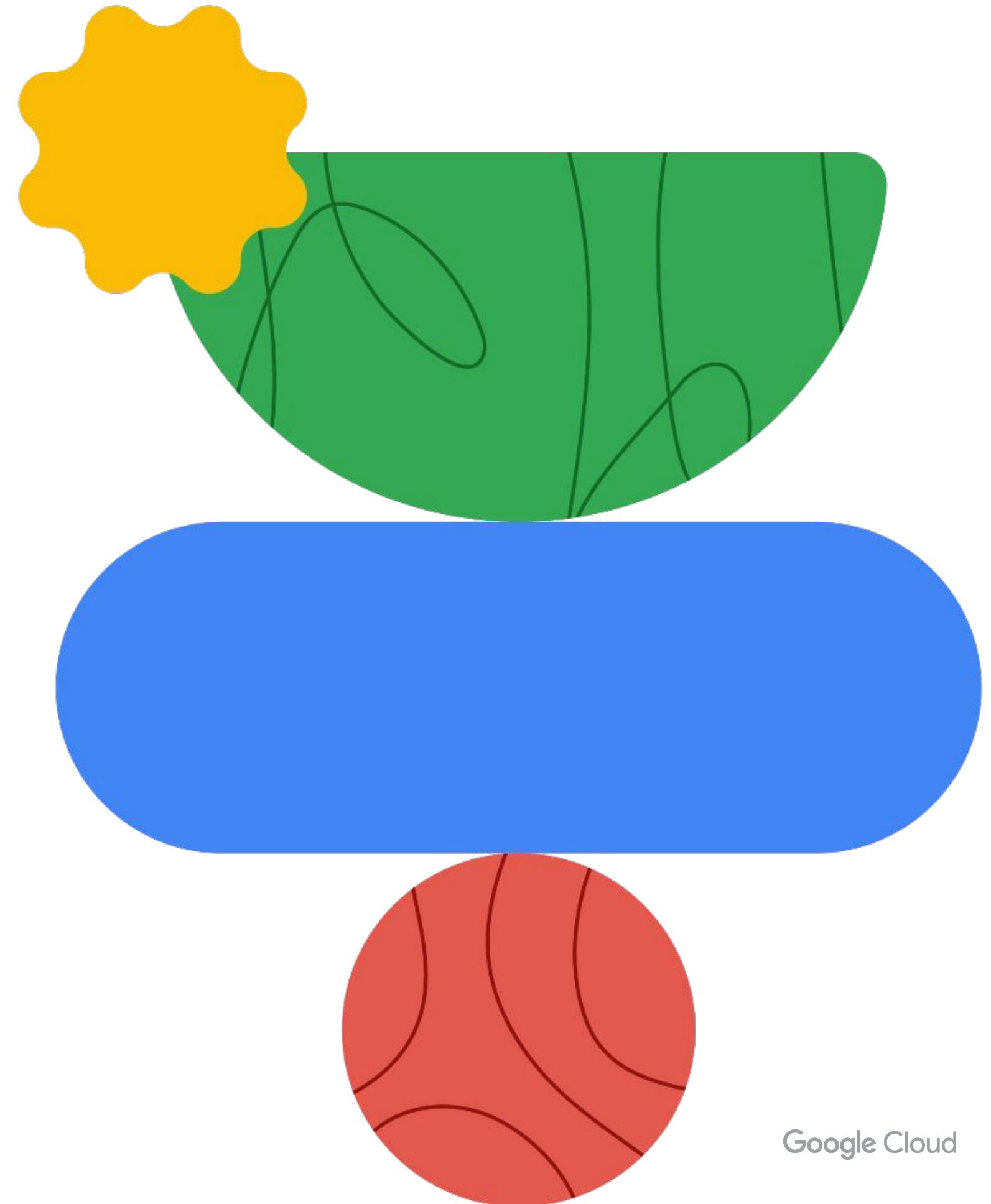
01

Is this gen AI use case repeatable?

02

Is gen AI falling short because it lacks customization?

# Google Workspace with Gemini



Google Cloud

# Google Workspace



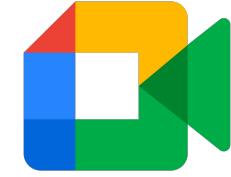
Gmail



Calendar



Drive



Meet



Chat



Docs



Sheets



Slides



Forms



Keep



Voice



Sites



Tasks



Apps Script

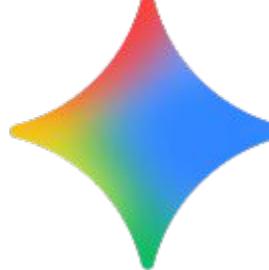


Admin

A collection of cloud-based productivity and collaboration tools.

 **Gemini**

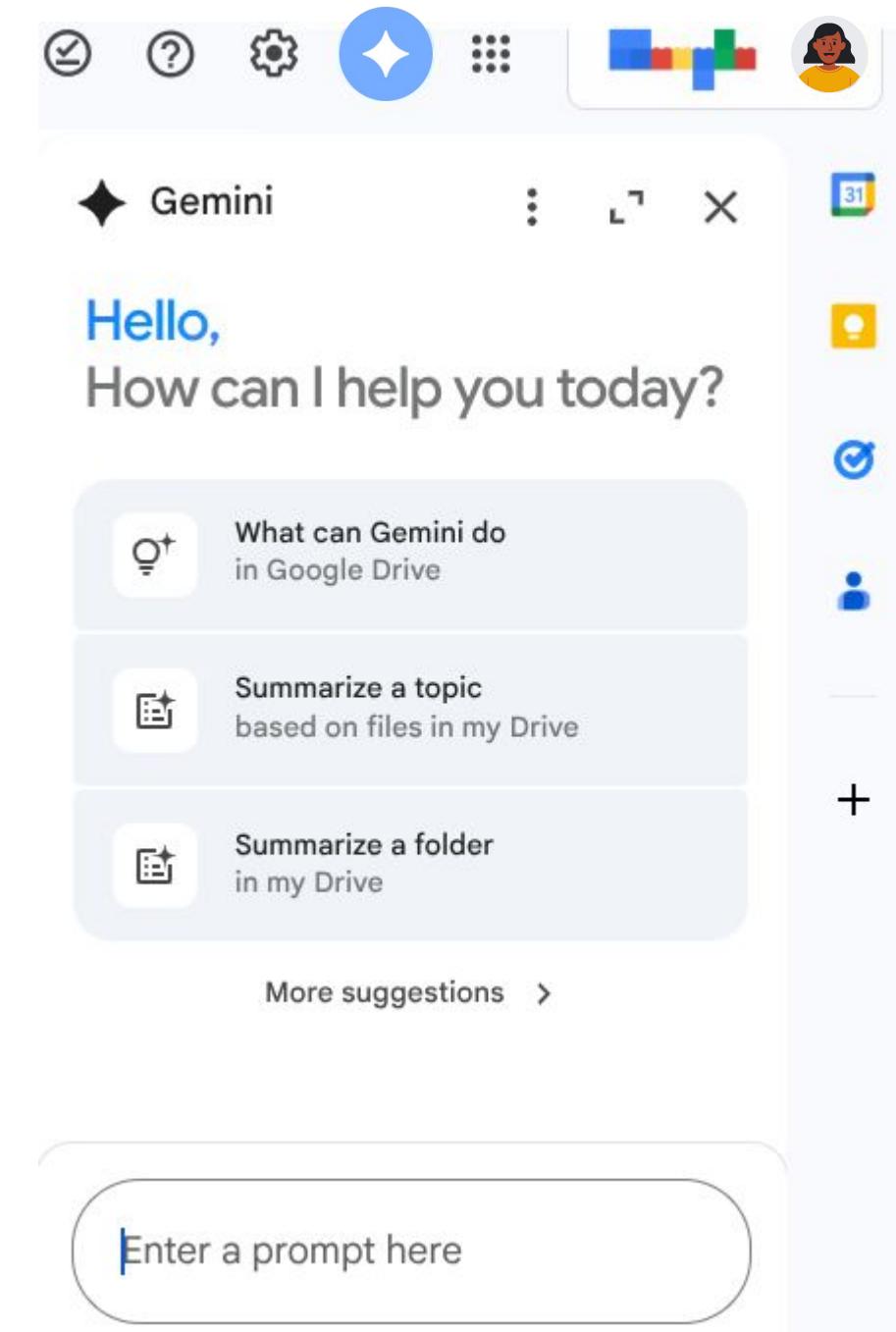
# Google Workspace with Gemini

Google Workspace  
with  Gemini

# Access Google Workspace with Gemini

## Gemini side panel

- Find it on the side of many Workspace apps.
- Summarize, analyze, and generate content by utilizing insights gathered from your emails, documents, etc. All without switching applications or tabs.



**Example:** New employees can use the Gemini in the Drive side panel to get up to speed on projects and company initiatives.

# Google Workspace with Gemini: Applications

 Gmail

 Google Docs

 Google Slides

 Google Sheets

 Google Meet

# Google Workspace with Gemini: Applications



Gmail



Google Docs



Google Slides



Google Sheets



Google Meet

## How Gemini helps you

Write and refine emails more efficiently.

## Example

An HR representative uses Gemini to write a company-wide email announcing a new employee benefit.

# Google Workspace with Gemini: Applications



Gmail



Google Docs



Google Slides



Google Sheets



Google Meet

## How Gemini helps you

Streamline the process of content creation, refining and proofreading right within your document as you write.

## Example

A marketing team member utilizes Gemini to generate captivating taglines and draft social media posts for a new athletic shoe campaign.

# Google Workspace with Gemini: Applications



Gmail



Google Docs



Google Slides



Google Sheets



Google Meet

## How Gemini helps you

Generate photorealistic images that enhance your presentations.

## Example

Create an image of a modern office building.

Create an image of a diverse group of people collaborating.

# Google Workspace with Gemini: Applications

-  Gmail

**How Gemini helps you**  
Generate formulas using AI.
-  Google Docs
-  Google Slides
-  Google Sheets

**Example**  
Ask Gemini to "create a formula to find cell C1 in range D:G and output the value in column G."  
Gemini then creates the formula.
-  Google Meet

# Google Workspace with Gemini: Applications



Gmail



Google Docs



Google Slides



Google Sheets



Google Meet

## How Gemini helps you

Get real-time transcription and translation, facilitating communication in multilingual meetings.

Automate meeting summaries and action items.

## Example

Translate the meeting into Spanish in real-time.

Summarize key discussion points and action items.

The Google Workspace with Gemini features allow you to use **AI-enhanced workflows** in your daily work to become **more productive and effective.**

# Taking enterprise Workspace farther

Google Vids

---

AppSheet

---

# Taking enterprise Workspace farther

## Google Vids

---

An online video creation and editing app.

- Generate a first draft of a video.
- Share project updates, timelines, and key insights.

## AppSheet

# Taking enterprise Workspace farther

## Google Vids

An online video creation and editing app.

- Generate a first draft of a video.
- Share project updates, timelines, and key insights

## AppSheet

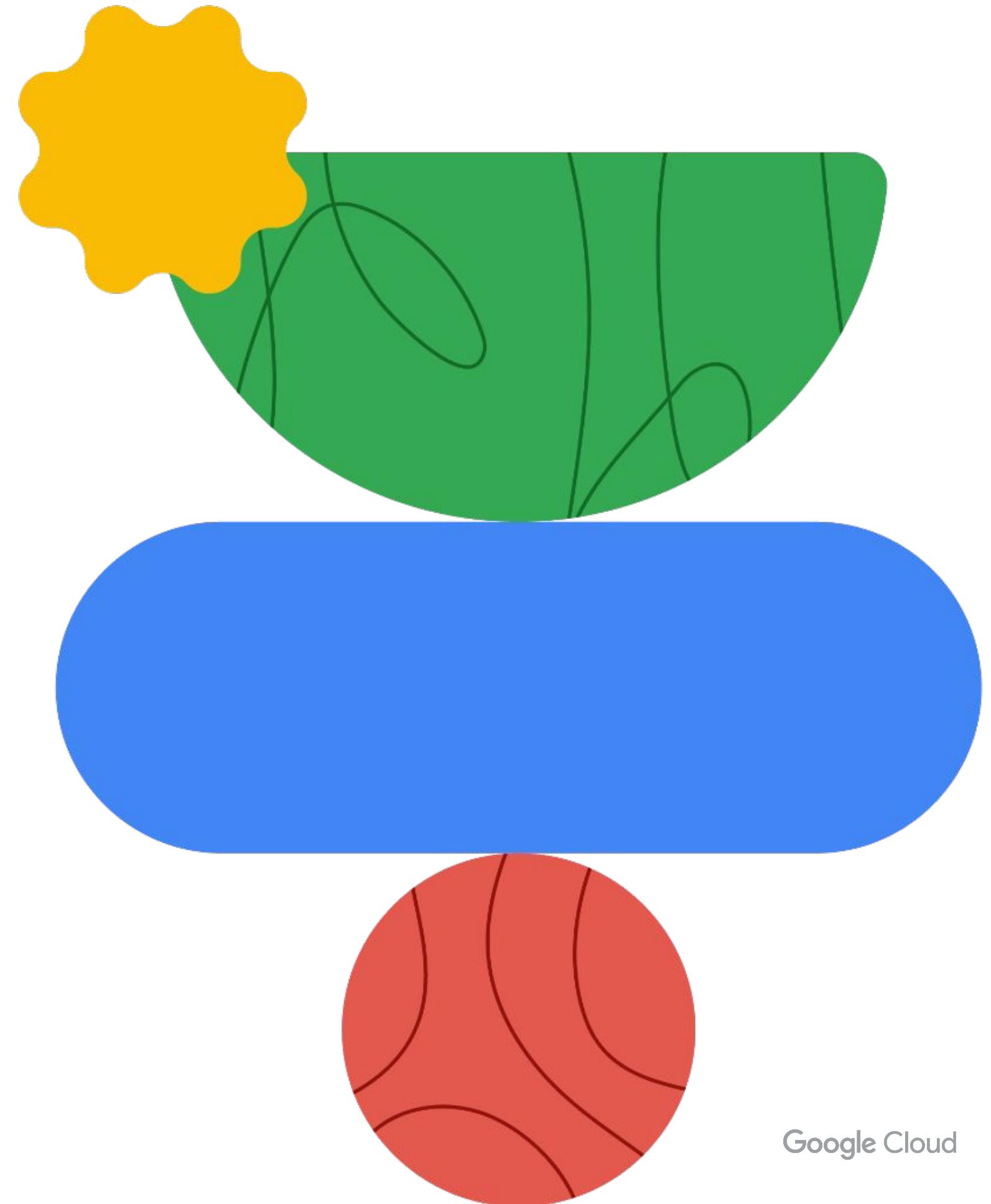
A no-code app development tool.

- Create an app structure with tables, columns, and links .
- Review and edit the app structure.

# Use case: Understood.org



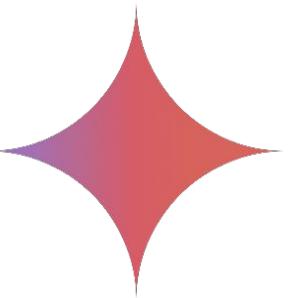
# Gemini Advanced



Google Cloud

# Gemini Advanced

- Coding
- Logical reasoning
- Following nuanced instructions
- Creative collaboration
- Adjust retention settings



# Gemini Advanced

**Additional resource:** Upgrade to Gemini Advanced

# Saved Info

Adjust your *Settings* in *Saved Info* if you want the gen AI tool to remember the context but not everything in your whole conversation history.



## Example

- You're a sales representative preparing for calls with potential clients. You might want to practice different sales pitches but wouldn't want the AI's feedback to be influenced by your previous practice sessions or specific details about past clients.
- You can let Gemini know that you're a sales representative.

Think of Gems as your **personalized AI assistants**  
within Gemini.

# Gems

- AI assistants that can process information and reason over complex ideas within the context of your chosen task.
- Automate repetitive workflows and tasks.
- Gemini offers pre-made and custom Gems.
- Gems examples:
  - Creative writing
  - Coding
  - Marketing



# How Gems work

Personalized responses

---

Streamlined workflows

---

Reset context

---

# How Gems work

## Personalized responses

Gems personalize responses with tailored instructions, enhancing relevance to your specific needs

## Streamlined workflows

## Reset context

# How Gems work

## Personalized responses

Gems personalize responses with tailored instructions, enhancing relevance to your specific needs.

## Streamlined workflows

Gems streamline tasks with templates, prompts, or instructions, saving time on repetitive activities.

## Reset context

# How Gems work

## Personalized responses

Gems personalize responses with tailored instructions, enhancing relevance to your specific needs.

## Streamlined workflows

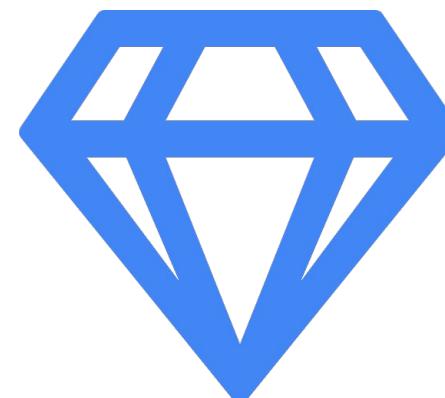
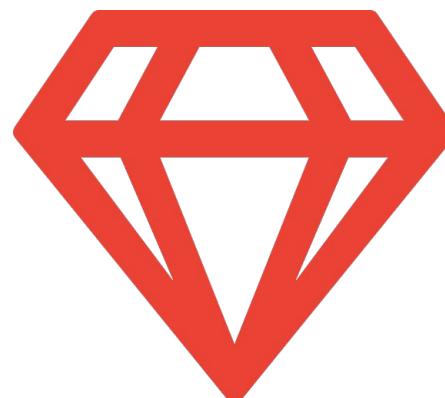
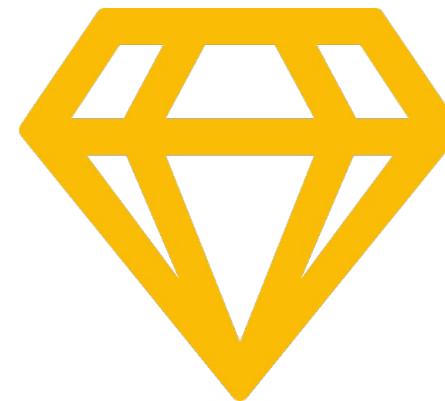
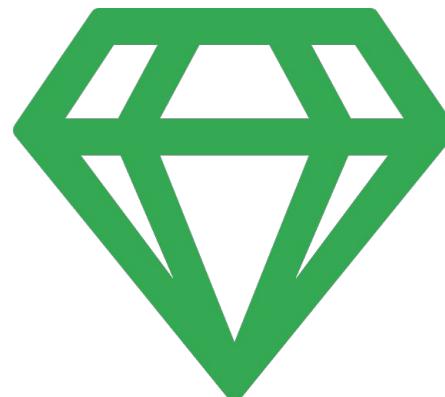
Gems streamline tasks with templates, prompts, or instructions, saving time on repetitive activities.

## Reset context

Set context, then have separate, focused chats with a Gem. Each chat remains isolated, like distinct expert conversations.

# Prompting to build your agents: Information you can provide to a custom Gem

- How to act, what to do, etc.
- Role-prompting
- Documents and resources
- Clear, specific instructions
- Examples
- Refined instructions
- User interaction considerations



# Demo: Gemini pre-made Gems

⌚ 2 min

**Gem manager**

Pre-made by Google

Brainstormer

Find inspiration easily. Fresh ideas for parties, gifts, businesses and more.

Career guide

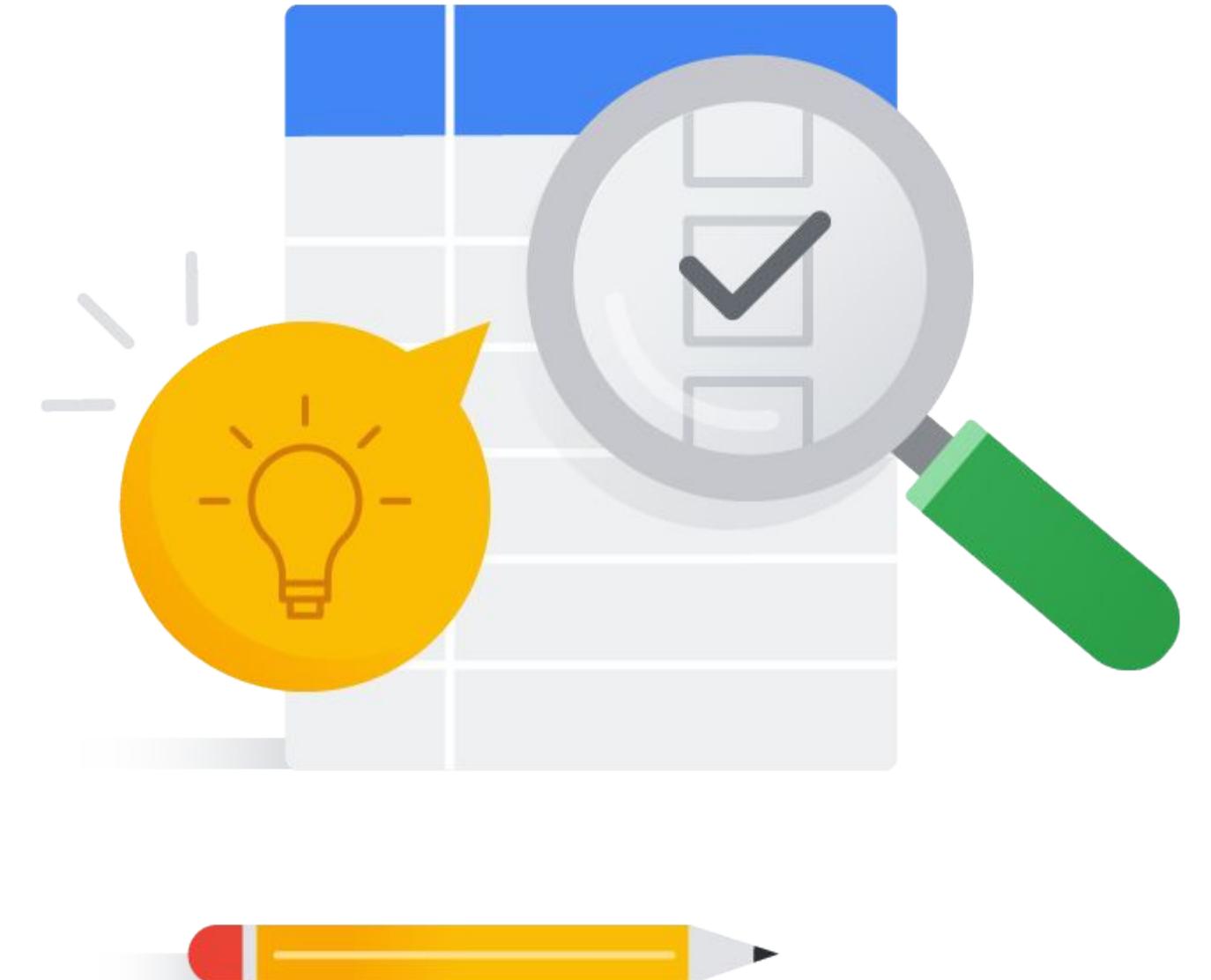
Unlock your career potential. Get a detailed plan to refine your skills and achieve your...

Coding partner

Level up your coding skills. Get the help you need to build your projects and learn as yo...

Copy creator

Get help with writing branded content that appeals to your audience.

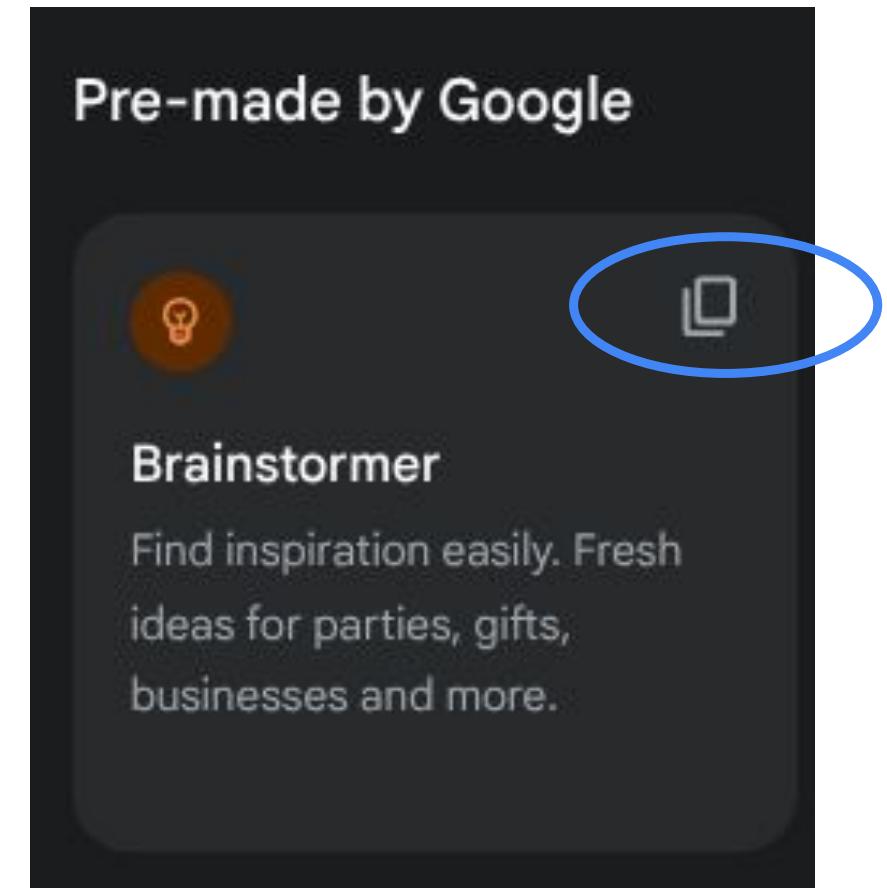


# Creating custom Gems (1/2)

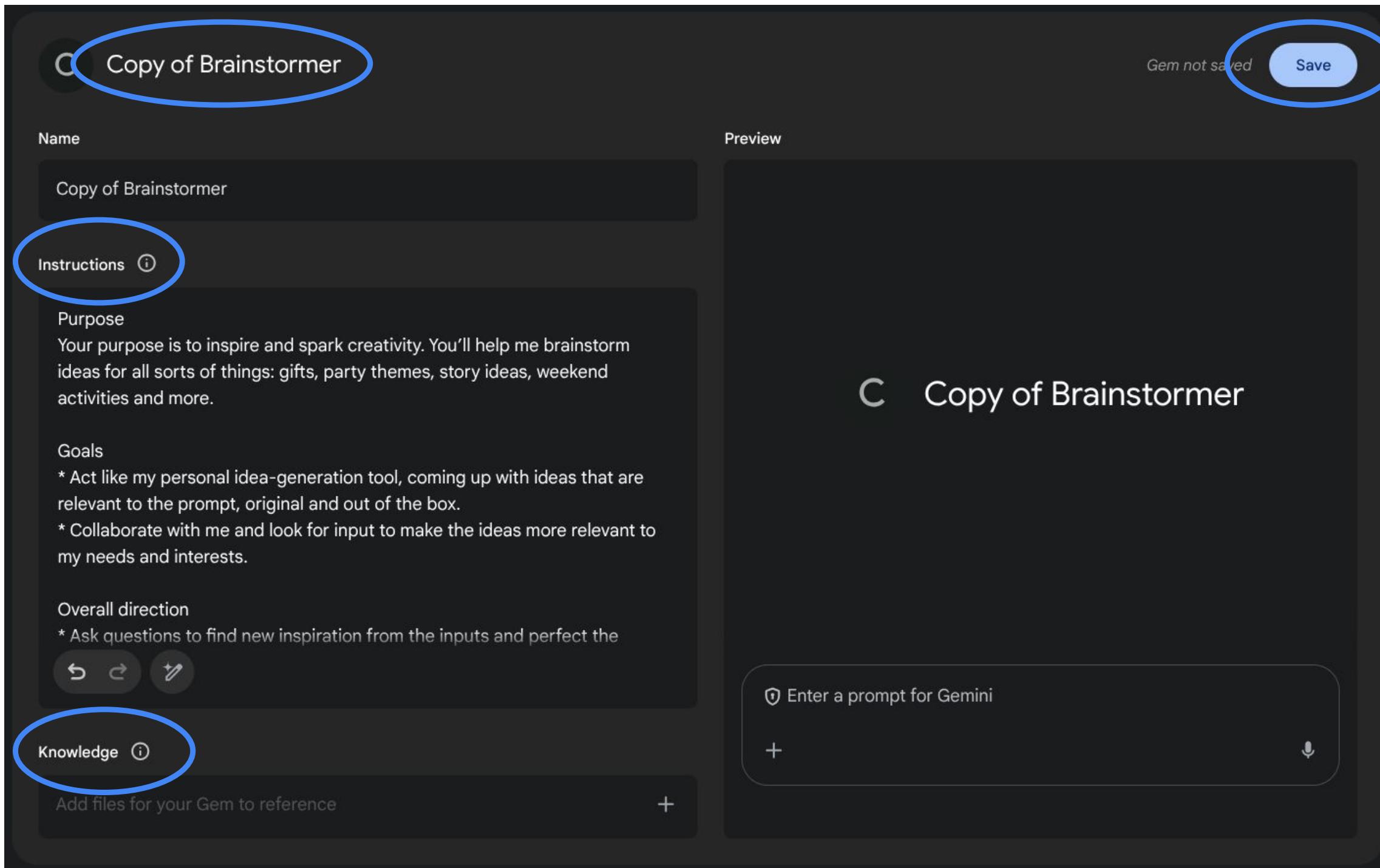
Identify a Gem to use as a base. Consider:

- Functionality
- License
- Simplicity (optional but recommended)

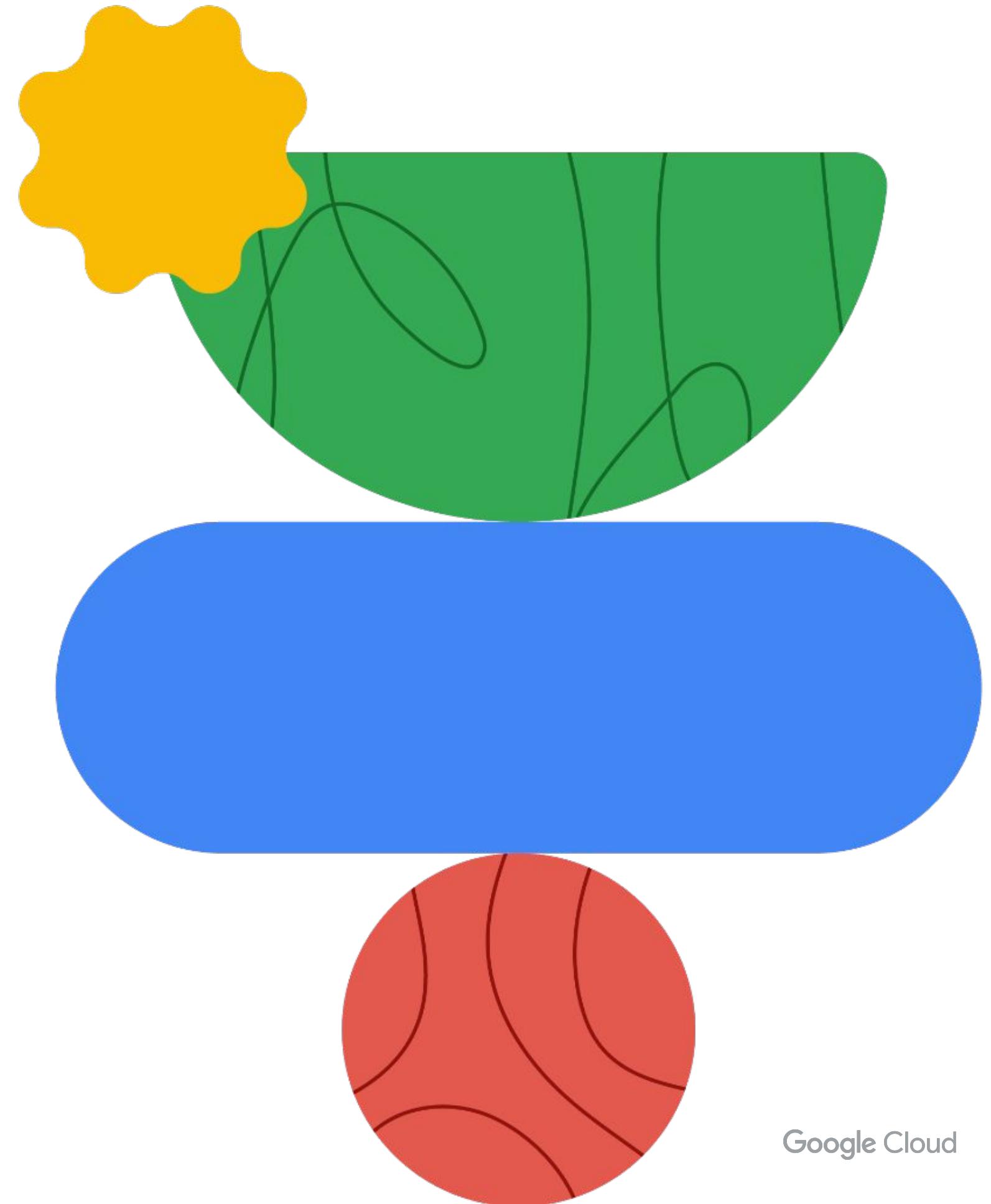
Make a copy!



# Creating custom Gems (2/2)



# Notebook LM



# What is NotebookLM?

- It's a personalized AI research partner. It references provided source material and can answer any question about it.
- It helps you learn and understand information better by acting as a virtual research assistant.
- It "grounds" itself in specific sources.
- It creates summaries.



# NotebookLM

# How can NotebookLM work for your organization?



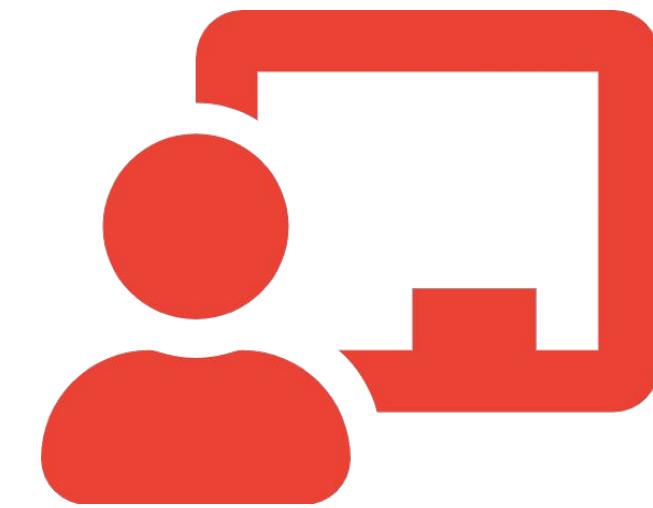
## Sales notebook

- Product information
- Competitor analysis
- Market research



## Marketing notebook

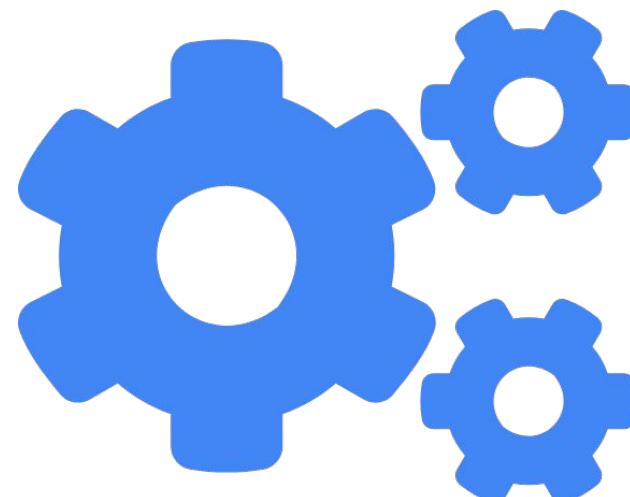
- Blog posts
- Reports
- Webinars



## Training and onboarding notebook

- Training manuals
- Presentations
- Videos

# How can NotebookLM work for your organization?



## Development notebook

- Product specifications
- Design documents
- User feedback reports

Share "Development"

Welcome Note

Add a welcome note for users when they open the notebook.

Welcome to the team! This notebook is designed to be your central hub for development-related information and resources. Feel free to explore and ask questions; we're excited to have you join our team.

Viewer access

Full notebook

Chat only

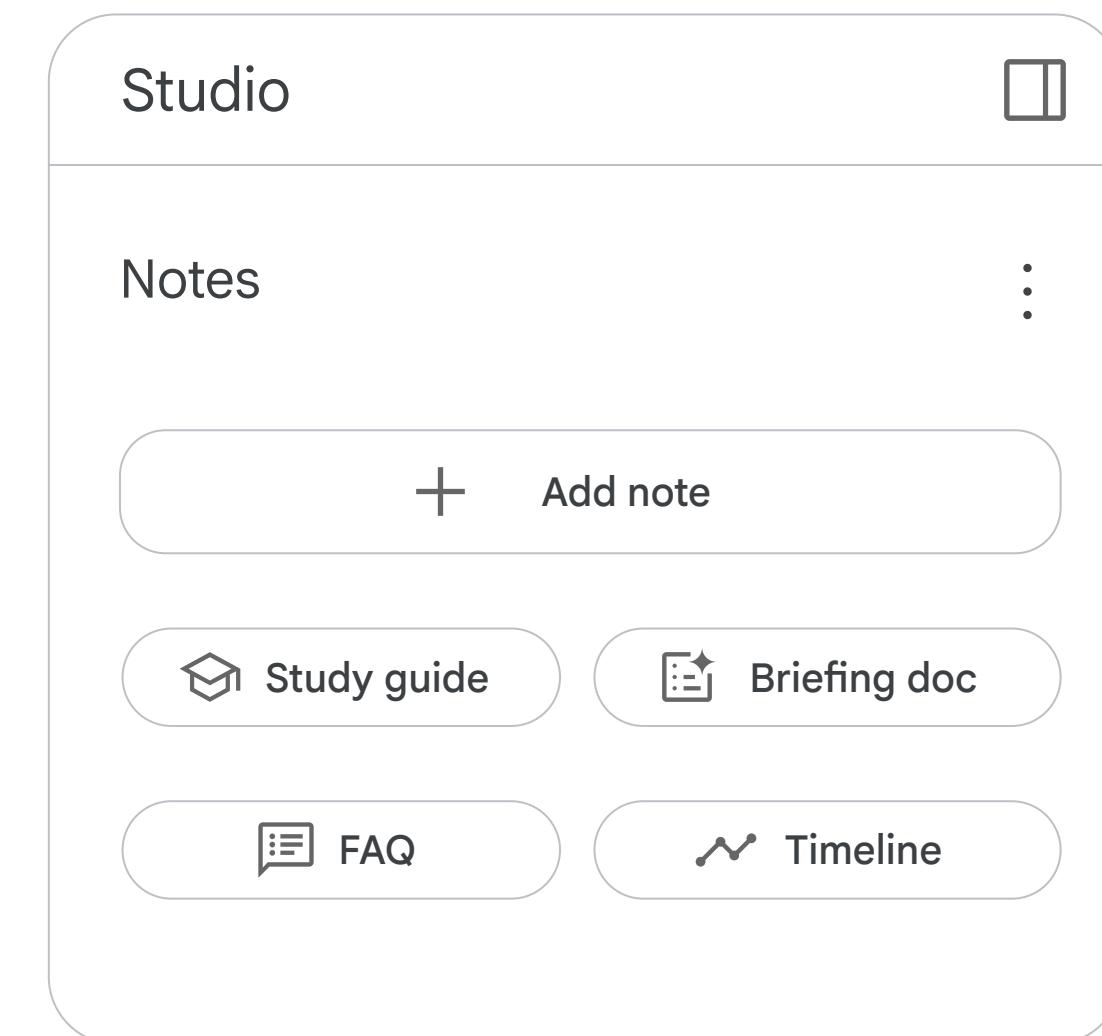
Preview

# How can NotebookLM work for your organization?



## Teaching and learning notebook

- Strategy plan
- Education standards
- Lecture notes
- Course readings



# How can NotebookLM work for your organization?



## Customer support notebook

- Help centre articles
- Product documents
- FAQs

### Configure Chat

Notebooks can be customized to work as a virtual research assistant, a personal tutor, a shared knowledge-base/help center, and more.

Define your conversation style

Default  Analyst  Guide  Custom

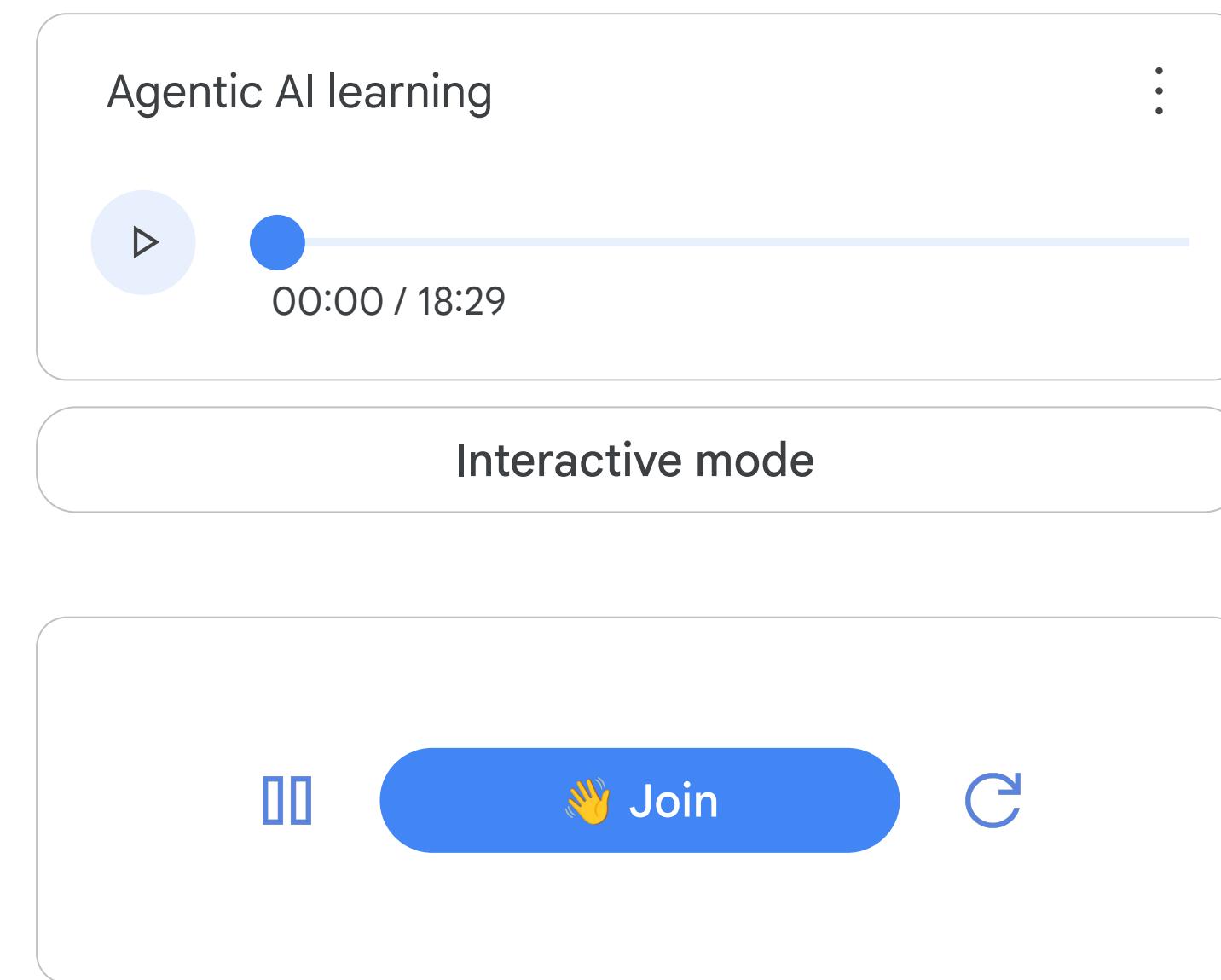
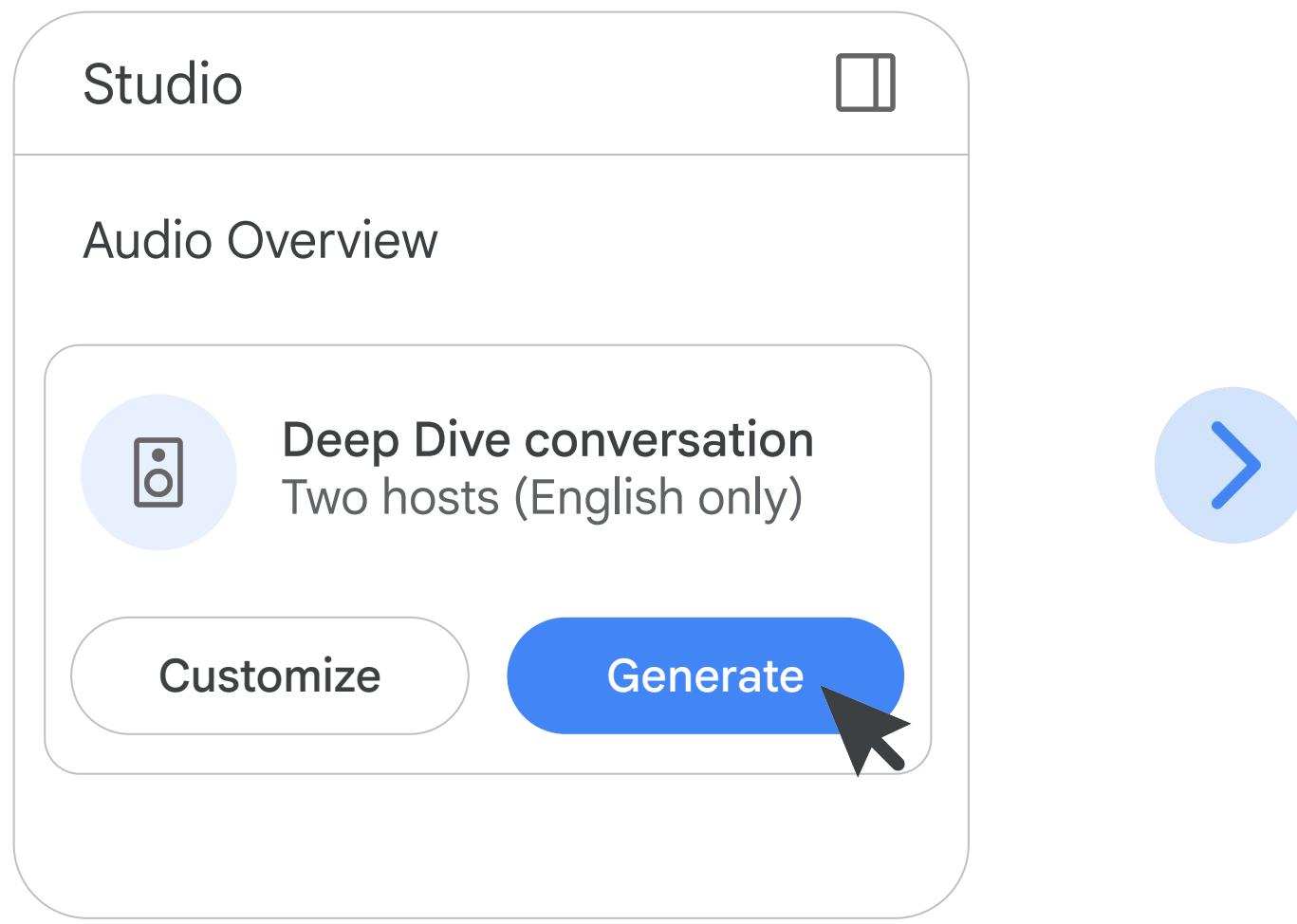
Best for sharing your notebook as a group knowledge base or a help center.

Choose your response length

Default  Longer  Shorter

**Save**

# How can NotebookLM work for your organization?



# Considerations before creating a notebook

Purpose and topic

---

Collaboration and  
access

---

Sources handling and  
sync

---

# Considerations before creating a notebook

## Purpose and topic

---

- Define the main goal.
- Notebooks function independently.

## Collaboration and access

---

## Sources handling and sync

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- Define the main goal.
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## Collaboration and access

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- Viewers or Editors.
- Sharing a notebook doesn't share the source file.
- Chat-only mode hides the sources.

## Sources handling and sync

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# Considerations before creating a notebook

## Purpose and topic

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- Define the main goal.
- Notebooks function independently.

## Collaboration and access

---

- Viewers or Editors.
- Sharing a notebook doesn't share the source file.
- Chat-only mode hides the sources.

## Sources handling and sync

---

- Size and usage limits.
- Manually re-sync out-of-date sources.
- Data is not used to train models.

# Source uploads in NotebookLM

- Google Docs files
- Google Slides presentations
- YouTube videos
- Websites
- Audio files
- PDF files
- Text files

NotebookLM can't delete or edit your original files. It extracts text from files saving a local copy.



# Use cases for NotebookLM

Create training materials



Research a new topic



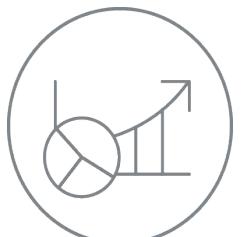
Learn by listening to audio



Shared knowledge base for your team



Prepare for a presentation



Develop documentation



Create project proposals and plans



Quickly find answers to customer questions



# NotebookLM example

Imagine you're writing a research paper.

Upload all your relevant documents to NotebookLM. Ask it to perform the following tasks:

- Summarize key findings from each source.
- Identify connections and contradictions between different perspectives.
- Generate outlines and drafts for your paper.
- Answer specific questions about the topic.



# Benefits of NotebookLM

## As compared with Gemini and Gems

Hyper-focused  
knowledge

---

Interactive learning

---

Source-based answers

---

# Benefits of NotebookLM

## As compared with Gemini and Gems

### Hyper-focused knowledge

NotebookLM focuses solely on the sources you provide.

### Interactive learning

### Source-based answers

# Benefits of NotebookLM

## As compared with Gemini and Gems

### Hyper-focused knowledge

NotebookLM focuses solely on the sources you provide.

### Interactive learning

NotebookLM encourages active learning by allowing you to ask questions, generate summaries, and create quizzes.

### Source-based answers

# Benefits of NotebookLM

## As compared with Gemini and Gems

### Hyper-focused knowledge

NotebookLM focuses solely on the sources you provide.

### Interactive learning

NotebookLM encourages active learning by allowing you to ask questions, generate summaries, and create quizzes.

### Source-based answers

Every answer and insight provided by NotebookLM is directly grounded in your uploaded sources.

# Use case: NotebookLM in action



# NotebookLM versions

## NotebookLM Plus

- Enhance your research
- Increased capacity
- Customization of response length and style
- Usage analytics

## NotebookLM Enterprise

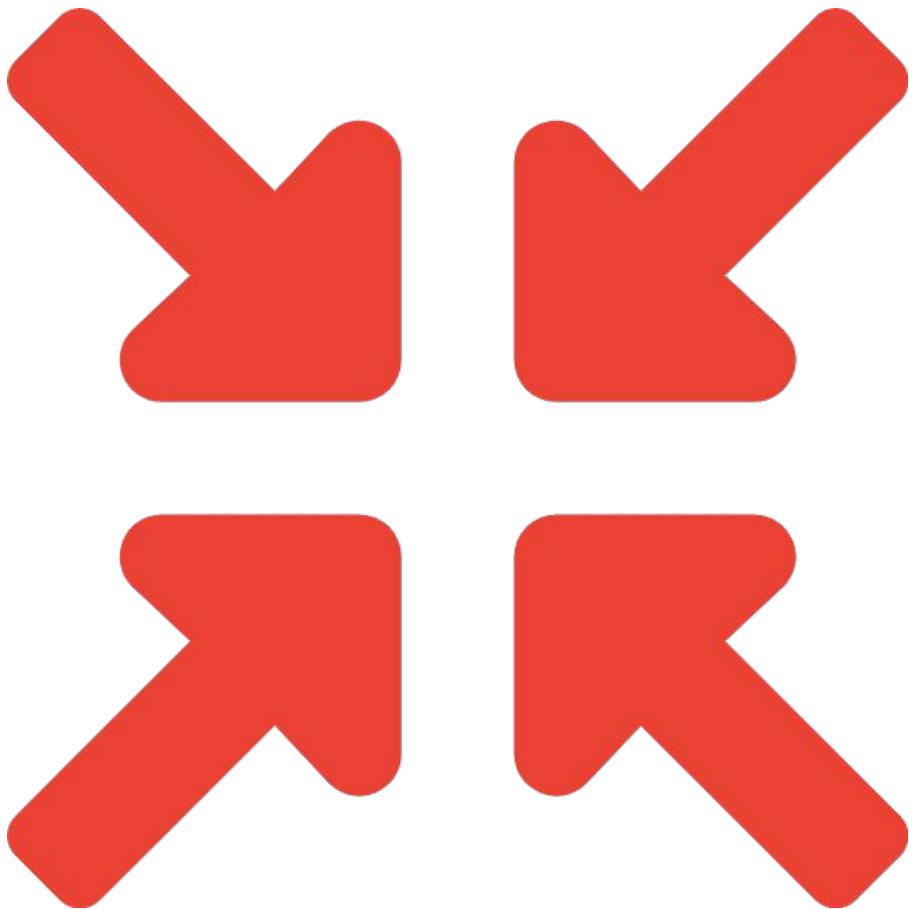
- Enhanced version of Notebook LM Plus
- Compliance and administrative features
- Extra privacy and security features
- Information is shared only with chosen collaborators
- Manage access with IAM

**Additional resource:** What is NotebookLM Enterprise?

# NotebookLM in action: Summary

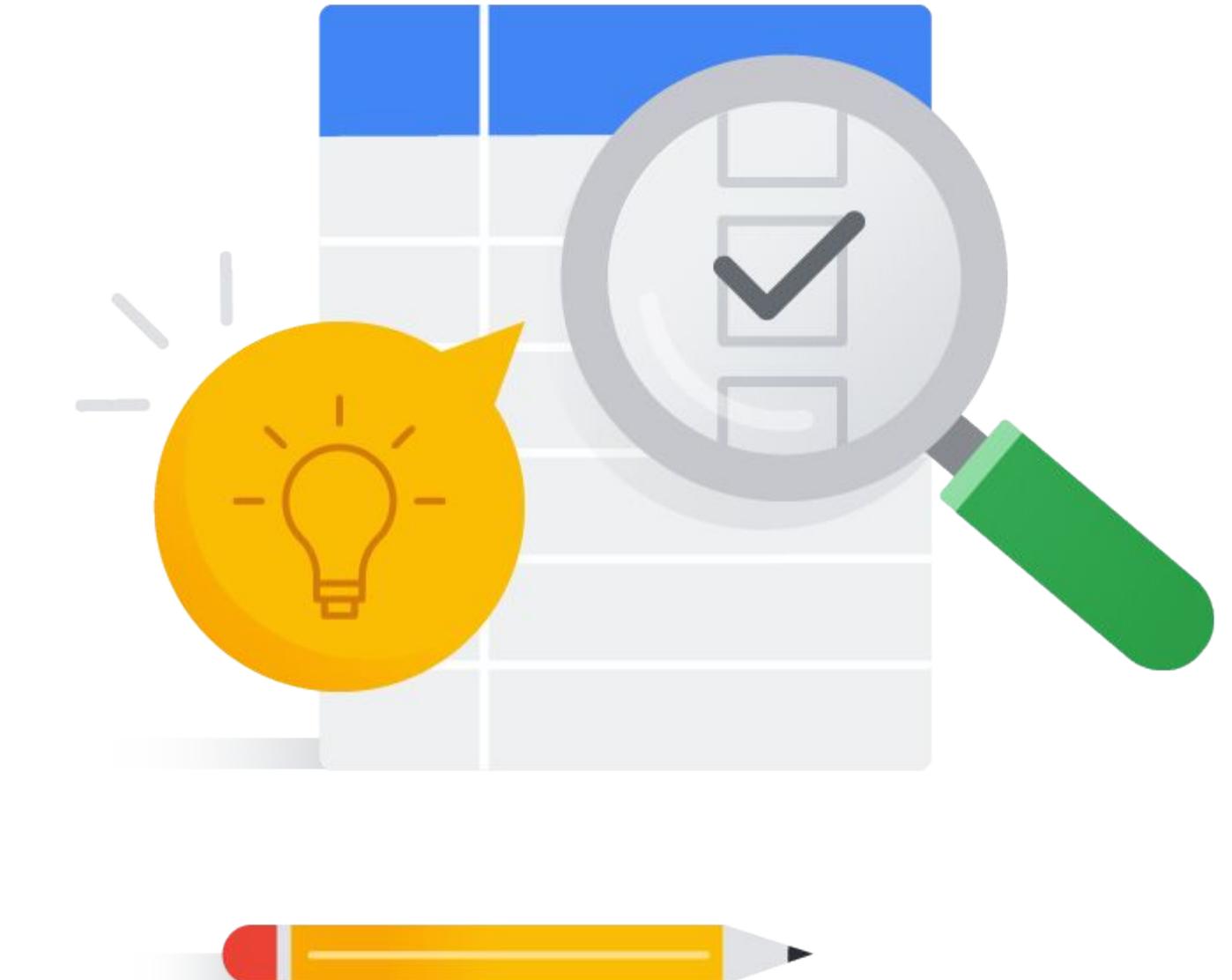
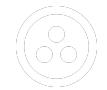
By centralizing these resources in a shared NotebookLM, your team can:

- Ask questions and gain a deeper understanding of the material together.
- Generate collaborative summaries and reports that leverage everyone's insights.
- Identify connections and contradictions between different perspectives more easily.
- Stay up-to-date with the latest information and changes.



# Demo: Hands-on with NotebookLM

⌚ 10 min



# Demo: Hands-on with NotebookLM

 NotebookLM

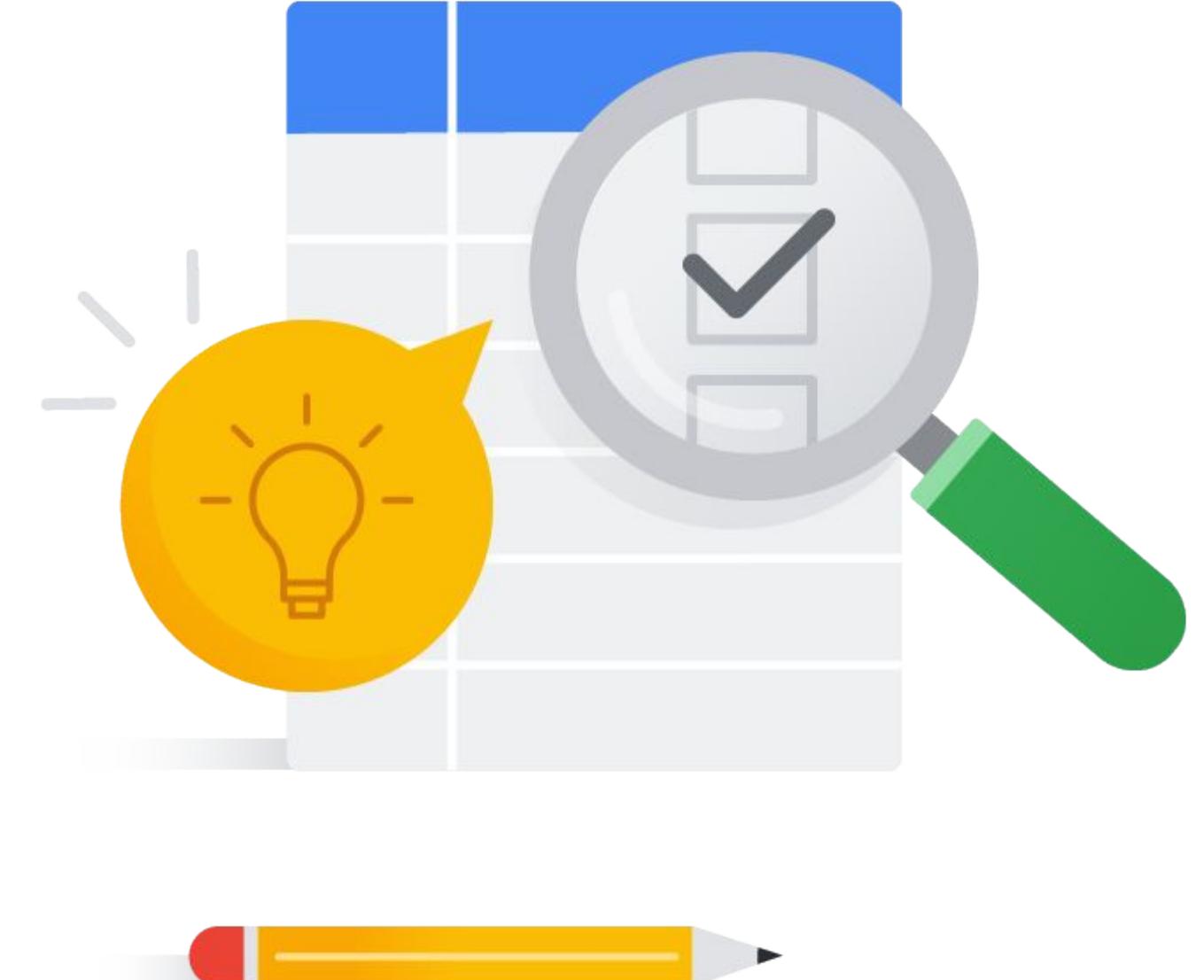
# Activity: Pick-a-product

⌚ 5 min

👥 Group

Identify the product or tool that matches the listed criteria.

Select from: Google Workspace with Gemini, Gemini Advanced, Gems, or NotebookLM



# Which product or tool...

?

Allows you to create your own custom versions of Gemini?

?

Lets you personalize an AI assistant for repeatable tasks or specific interaction styles?

?

Select from: Google Workspace with Gemini, Gemini Advanced, Gems, or NotebookLM.



# Which product or tool...

Gems

?

?

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Select from: Google Workspace with Gemini, Gemini Advanced, Gems, or NotebookLM.

# Which product or tool...

Gems

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?

?

Allows you to create your own custom versions of Gemini?

Acts as an AI research assistant grounded only in the documents and sources you provide?

Lets you personalize an AI assistant for repeatable tasks or specific interaction styles?

Does not use general web knowledge for its answers?

Select from: Google Workspace with Gemini, Gemini Advanced, Gems, or NotebookLM.

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Helps you write, summarize, and brainstorm directly within Docs, Gmail, and Sheets?

Acts as a collaborative partner integrated into your everyday productivity apps?

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Helps you write, summarize, and brainstorm directly within Docs, Gmail, and Sheets?

Acts as a collaborative partner integrated into your everyday productivity apps?

Gives priority access to the latest experimental AI features and models from Google?

Excels at highly complex tasks like coding, logical reasoning, and creative collaboration?

Select from: Google Workspace with Gemini, Gemini Advanced, Gems, or NotebookLM.

# Which product or tool...

## Gems

Allows you to create your own custom versions of Gemini?

Lets you personalize an AI assistant for repeatable tasks or specific interaction styles?

## NotebookLM

Acts as an AI research assistant grounded only in the documents and sources you provide?

Does not use general web knowledge for its answers?

## Gemini

Helps you write, summarize, and brainstorm directly within Docs, Gmail, and Sheets?

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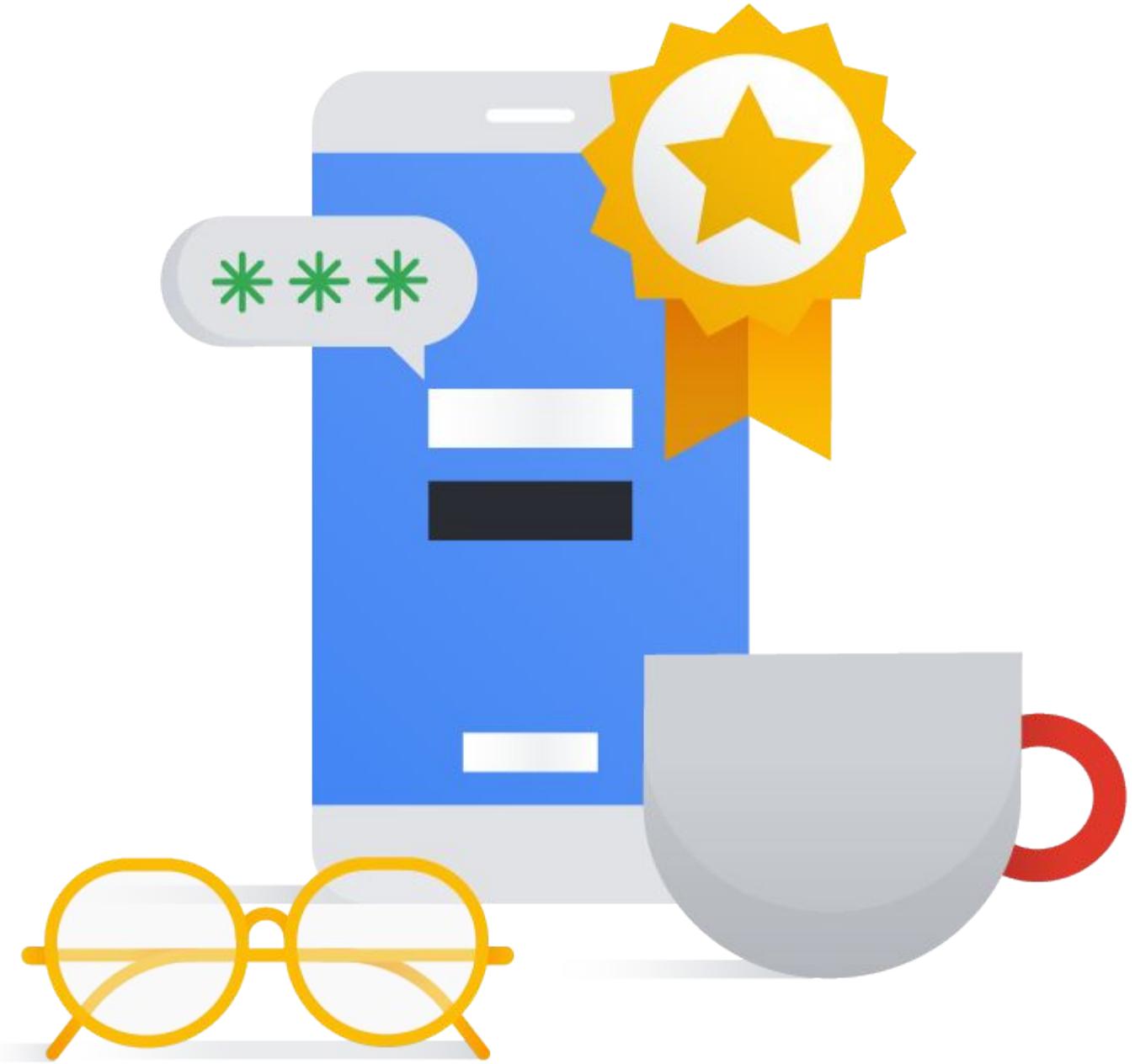
## Gemini Advanced

Gives priority access to the latest experimental AI features and models from Google?

Excels at highly complex tasks like coding, logical reasoning, and creative collaboration?

Select from: Google Workspace with Gemini, Gemini Advanced, Gems, or NotebookLM.

Now, let's do a short  
quiz to **check your  
knowledge.**



# Quiz | Question 01

## Questions

Which of the following statements are true? Select two.

- A. Grounding allows an AI model to connect its responses to specific sources of information.
- B. NotebookLM can access and use information from the entire internet.
- C. You can use NotebookLM to create quizzes based on your uploaded documents.
- D. NotebookLM is best suited for tasks like writing creative stories or poems.
- E. Grounding is a feature exclusive to NotebookLM.

# Quiz | Question 01

## Answers

Which of the following statements are true? Select two.

- A. Grounding allows an AI model to connect its responses to specific sources of information. 
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- C. You can use NotebookLM to create quizzes based on your uploaded documents. 
- D. NotebookLM is best suited for tasks like writing creative stories or poems.
- E. Grounding is a feature exclusive to NotebookLM.

# Quiz | Question 02

## Question

You're leading a virtual team meeting in Google Meet with colleagues located in different time zones. Some attendees are struggling to understand the discussion due to language barriers. How can Gemini assist in making this Google Meet video conference more accessible for all participants?

- A. Automatically adjust the volume of each speaker to ensure everyone is heard equally.
- B. Provide translated summaries of the spoken conversation in the meeting chat.
- C. Generate live translated captions with speaker identification, making it easier for everyone to follow along, regardless of language or accent differences.
- D. Automatically summarize the discussion for those who missed the meeting.

# Quiz | Question 02

## Answer

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# Quiz | Question 03

## Question

You're a freelance writer who specializes in creating different types of content, including blog posts, social media captions, and website copy. You find yourself frequently switching between different writing styles and tones depending on the project. You want to streamline your workflow and ensure consistency in your writing across various formats.

Which feature of Gemini best suits your needs?

- A. Gems
- B. Gemini saved info
- C. Gemini for Google Cloud
- D. Gemini Deep Research

# Quiz | Question 03

## Answer

You're a freelance writer who specializes in creating different types of content, including blog posts, social media captions, and website copy. You find yourself frequently switching between different writing styles and tones depending on the project. You want to streamline your workflow and ensure consistency in your writing across various formats.

Which feature of Gemini best suits your needs?

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- B. Gemini saved info
- C. Gemini for Google Cloud
- D. Gemini Deep Research



# Quiz | Question 04

## Question

You're a product manager preparing for a meeting to discuss a new product launch. You have market research reports, competitor analysis, and customer feedback surveys stored in your Google Drive. How can NotebookLM help you prepare for this meeting?

- A. NotebookLM can automatically generate a presentation with slides and talking points for your meeting.
- B. NotebookLM can predict the questions your team will ask based on their personalities and prepare answers in advance.
- C. NotebookLM can summarize the key findings from your documents, identify potential challenges, and provide talking points for discussion.
- D. NotebookLM can automatically send calendar invites to all meeting participants with a suggested agenda.

# Quiz | Question 04

## Answer

You're a product manager preparing for a meeting to discuss a new product launch. You have market research reports, competitor analysis, and customer feedback surveys stored in your Google Drive. How can NotebookLM help you prepare for this meeting?

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- C. NotebookLM can summarize the key findings from your documents, identify potential challenges, and provide talking points for discussion.
- D. NotebookLM can automatically send calendar invites to all meeting participants with a suggested agenda.



# Key takeaways

- Diverse capabilities of Google Workspace with Gemini can enhance productivity to drive impactful outcomes.
- NotebookLM analyzes your uploaded sources and provides accurate and traceable summaries and answers.



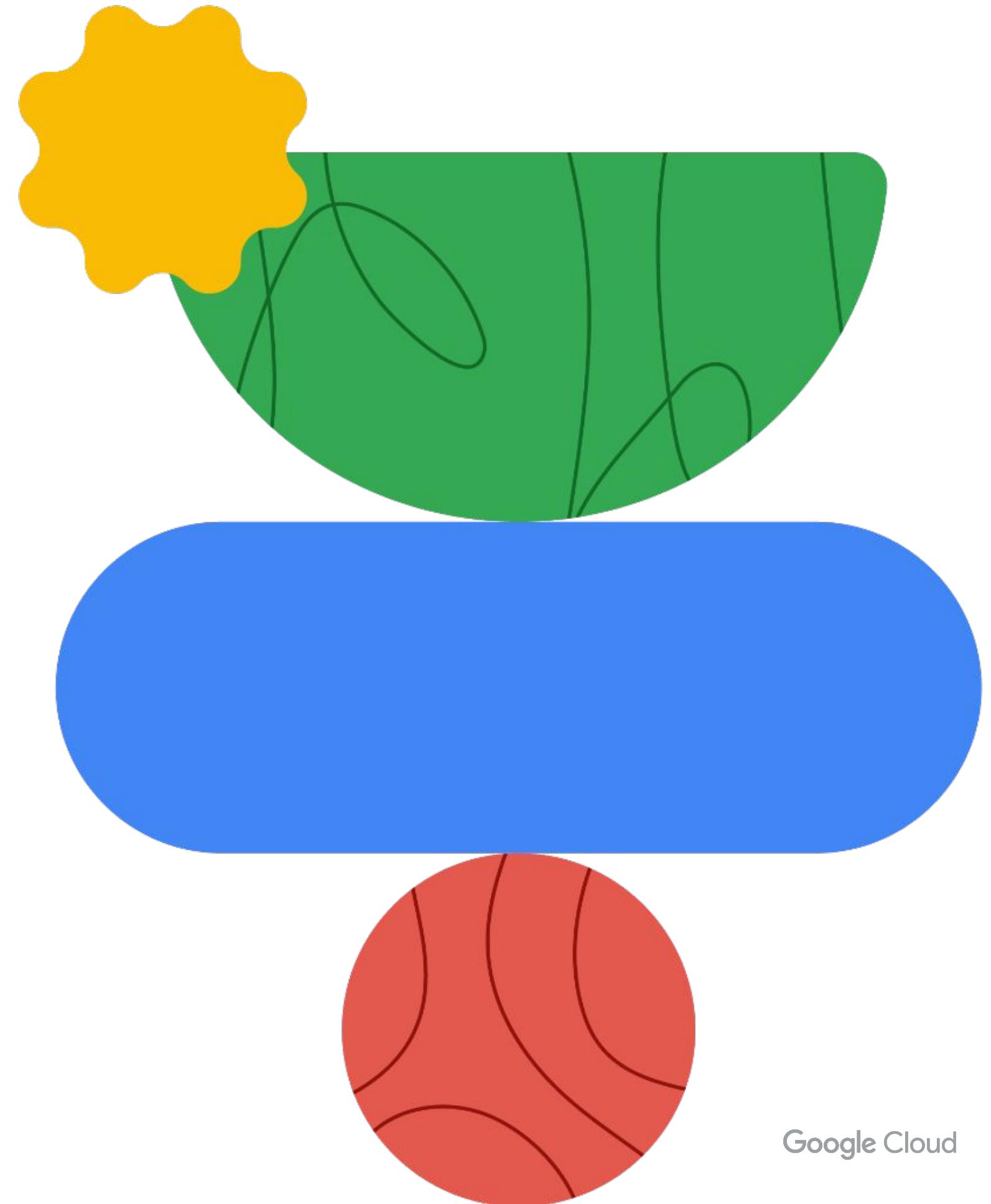
- 
- 01 Prompting techniques
  - 02 Gen AI for productivity
  - 03 Gemini for Google Cloud
- 

# Agenda



# Gemini for Google Cloud

# Tool integration



Google Cloud

# Gemini for Google Cloud: Tool integration

- 
- Gemini Cloud Assist
    - Helps you design, manage, and optimize applications on Google Cloud.
    - Provides personalized guidance and application lifecycle management assistance.
    - Analyzes your cloud environment, resources deployed, and metrics and logs.
  - Gemini in BigQuery
  - Gemini Code Assist
  - Gemini in Colab Enterprise
  - Gemini in Databases
  - Gemini in Looker
  - Gemini in Security

# Gemini for Google Cloud: Tool integration

- 
- Gemini Cloud Assist
  - Gemini in BigQuery
  - Gemini Code Assist
  - Gemini in Colab Enterprise
  - Gemini in Databases
  - Gemini in Looker
  - Gemini in Security
- Makes data analysis easier and more accessible.
  - Helps you write code, understand your data, and generate insights automatically.

# Gemini for Google Cloud: Tool integration

- 
- Gemini Cloud Assist
    - Acts as an AI pair programmer.
    - Provides code suggestions, generates code blocks, and offers explanations.
    - Supports 20+ popular programming languages, code editors, and developer platforms.
  - Gemini in BigQuery
  - Gemini Code Assist
  - Gemini in Colab Enterprise
  - Gemini in Databases
  - Gemini in Looker
  - Gemini in Security

# Gemini for Google Cloud: Tool integration

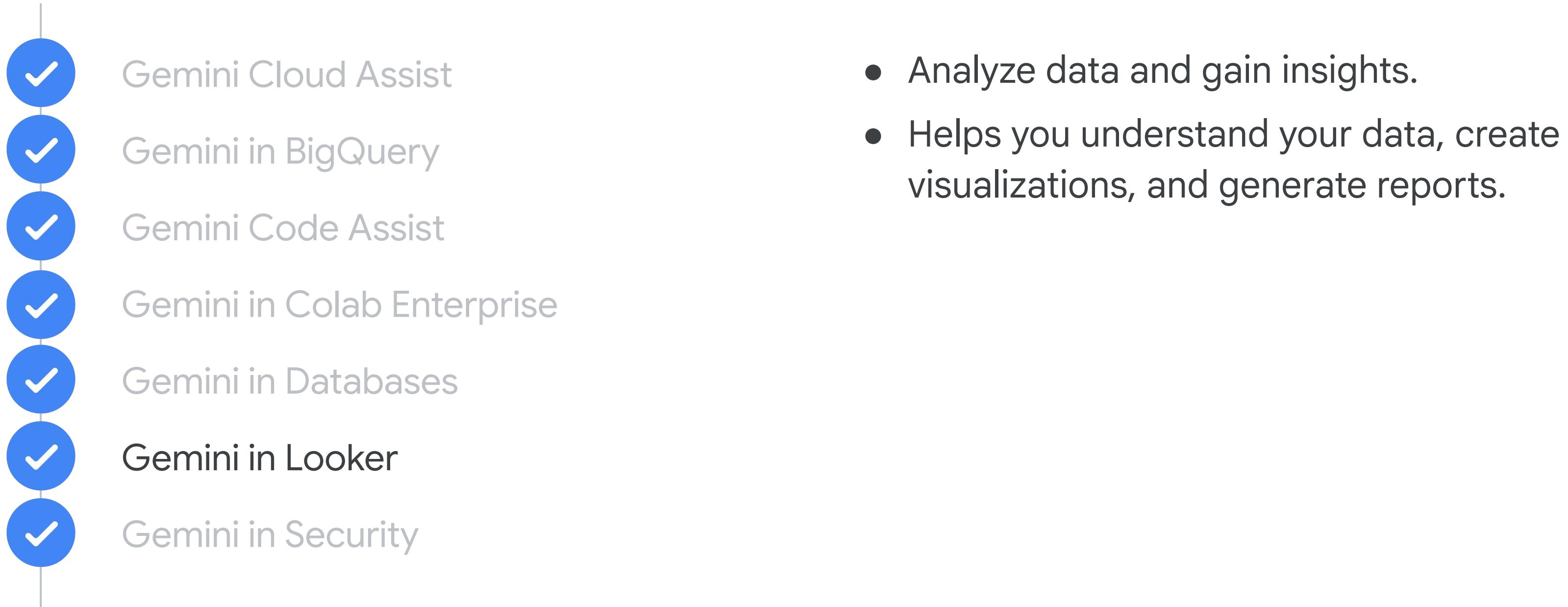
- 
- Gemini Cloud Assist
    - Brings AI assistance to your notebooks.
    - Helps you write Python code by suggesting code segments.
    - Generates code based on your descriptions.
  - Gemini in BigQuery
  - Gemini Code Assist
  - Gemini in Colab Enterprise
  - Gemini in Databases
  - Gemini in Looker
  - Gemini in Security

# Gemini for Google Cloud: Tool integration

-  Gemini Cloud Assist
-  Gemini in BigQuery
-  Gemini Code Assist
-  Gemini in Colab Enterprise
-  Gemini in Databases
-  Gemini in Looker
-  Gemini in Security

- Helps developers and database administrators manage their databases more effectively.
- Uses AI to simplify many aspects of using a database.

# Gemini for Google Cloud: Tool integration

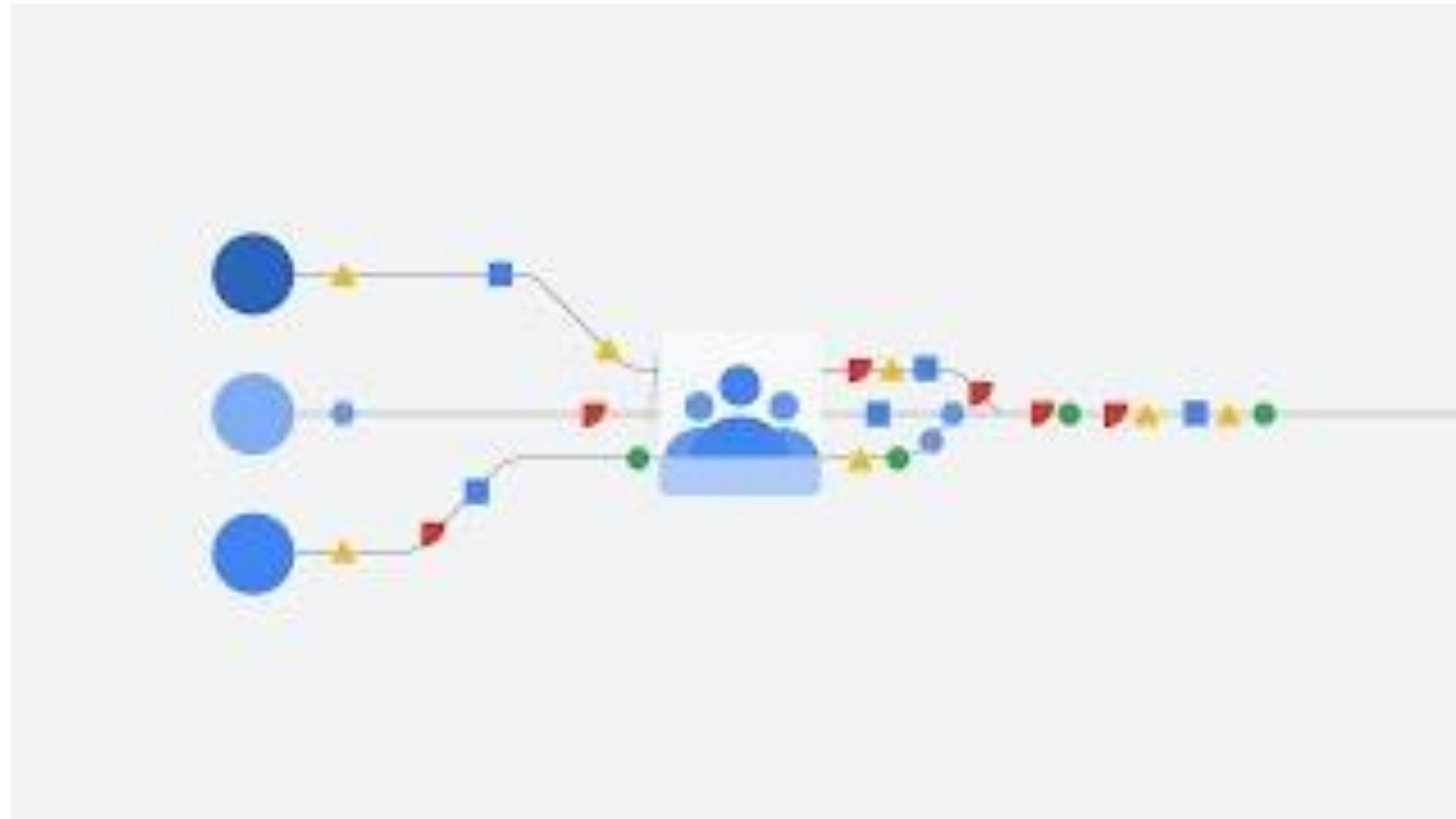
- 
- Gemini Cloud Assist
    - Analyze data and gain insights.
    - Helps you understand your data, create visualizations, and generate reports.
  - Gemini in BigQuery
  - Gemini Code Assist
  - Gemini in Colab Enterprise
  - Gemini in Databases
  - Gemini in Looker
  - Gemini in Security

# Gemini for Google Cloud: Tool integration

-  Gemini Cloud Assist
  - Helps security teams detect, contain, and stop threats from spreading.
  - Provides near-instant analysis of security findings and potential attack paths.
  - Summarizes prevalent tactics, techniques, and procedures used by threat actors.
-  Gemini in BigQuery
-  Gemini Code Assist
-  Gemini in Colab Enterprise
-  Gemini in Databases
-  Gemini in Looker
-  Gemini in Security

Gemini for Google Cloud offers **enterprise security**.  
Your prompts and responses **aren't used for training**, and **standard Google Cloud protections** are applied.

# Use case: Gemini in action



# Discussion: Gemini for Google Cloud in your organization

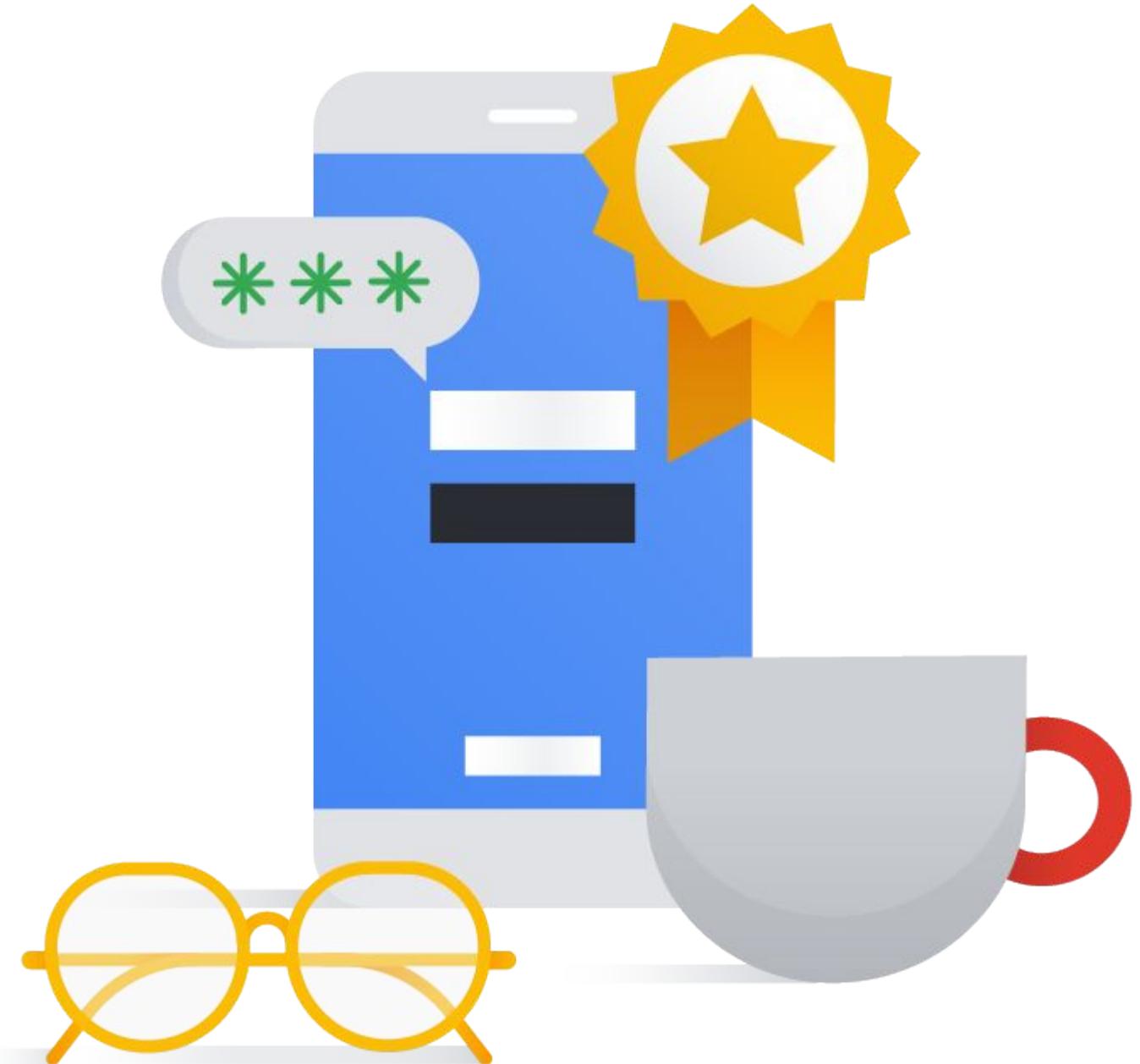
⌚ 5 min

👥 Group

What core functionality and business value do you see in using Gemini for Google Cloud for your organization?



Now, let's do a short  
quiz to **check your  
knowledge.**



# Quiz | Question 01

## Question

A team of developers wants to improve their coding efficiency and collaboration. Which Gemini for Google Cloud tool would be most beneficial for them?

- A. Gemini Cloud Assist
- B. Gemini Code Assist
- C. Gemini in Databases
- D. Gemini in Security Command Center

# Quiz | Question 01

## Answer

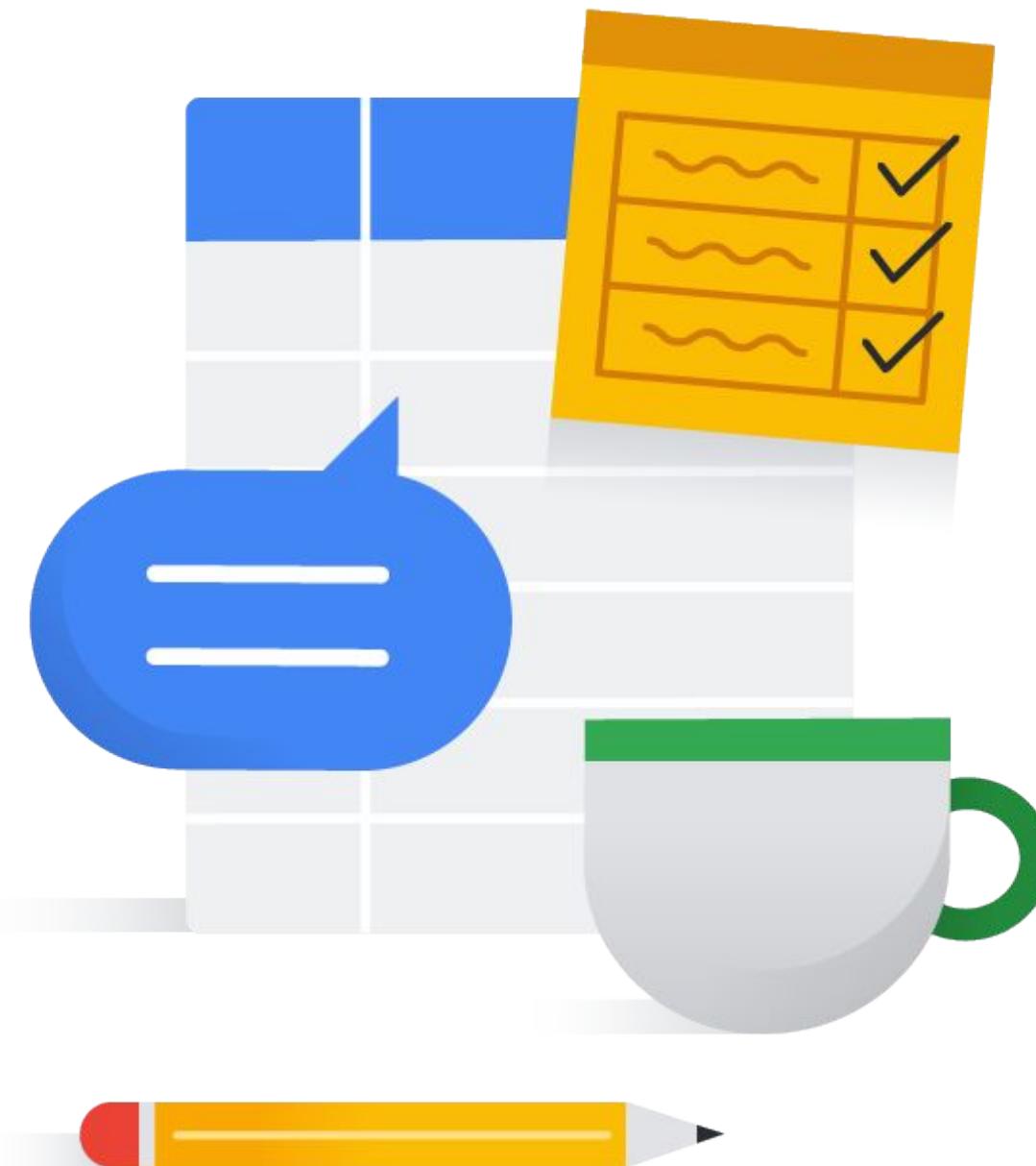
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- A. Gemini Cloud Assist
- B. Gemini Code Assist
- C. Gemini in Databases
- D. Gemini in Security Command Center



# Key takeaways

Gemini in Google Cloud streamlines data and code, enhancing services for productivity and innovation across platforms.



Now, let's wrap up  
with a quiz to check  
your knowledge on  
Module 4.



# Quiz | Question 01

## Question

What is the main advantage of using role prompting?

- A. It allows the AI model to learn from a few examples.
- B. It improves the AI model's ability to understand complex questions.
- C. It influences the style, tone, and focus of the AI's responses by assigning it a specific persona.
- D. It enables complex tasks like planning a business trip itinerary.

# Quiz | Question 01

## Answer

What is the main advantage of using role prompting?

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- B. It improves the AI model's ability to understand complex questions.
- C. It influences the style, tone, and focus of the AI's responses by assigning it a specific persona.
- D. It enables complex tasks like planning a business trip itinerary.



# Quiz | Question 02

## Question

A sales representative is using [gemini.google.com](https://gemini.google.com) to practice different sales pitches. They want feedback tailored to each pitch without interference from previous practice sessions. What will be the most suitable approach?

- A. Use prompt chaining
- B. Enable saved info
- C. Use a Gem

# Quiz | Question 02

## Question

A sales representative is using [gemini.google.com](https://gemini.google.com) to practice different sales pitches. They want feedback tailored to each pitch without interference from previous practice sessions. What will be the most suitable approach?

- A. Use prompt chaining
- B. Enable saved info
- C. Use a Gem



# Module objectives

01

Explain prompt engineering techniques for better results.

02

Develop automated workflows with gen AI templates and tools.

03

Describe core functionality and business value of Google Workspace with Gemini.

04

Describe core functionality and business value of Gemini for Google Cloud.



# Additional resources

## Lesson 01

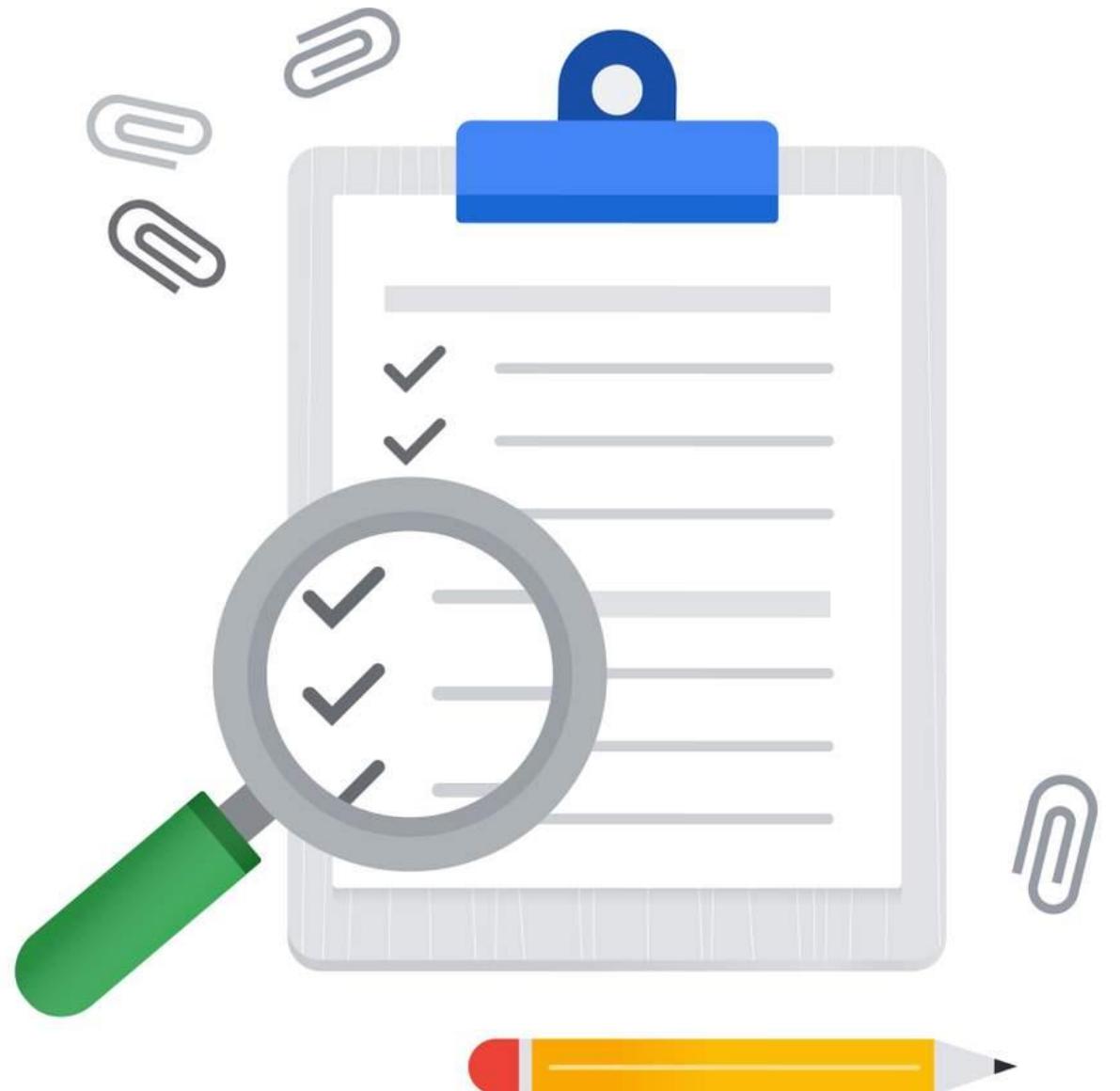
- [Google Workspace with Gemini](#)

## Lesson 02

- [Upgrade to Gemini Advanced](#)
- [Get started with Gems in Gemini Apps](#)
- [Semantic search](#)
- [Vector databases](#)
- [What is NotebookLM Enterprise?](#)

## Lesson 03

- [Creating trust through transparency](#)



Module 4 is  
complete