OPENAI

PROMPT ENGINEERING
GUIDE SUMMARY

SKILL LEAP AI

OpenAI Prompt Engineering Guide Summary
For non-developers (created by skillleap.ai)

(Includes 100+ additional prompts)

Reference Link:
https://platform.openai.com/docs/guides/prompt-engineering/prompt-engineering

----

Strategy 1: Write clear instructions

To get the most accurate and satisfying responses from these models, be specific in your requests: ask for shorter answers if they're too long, request more detailed or expert-level responses if they're too simple, and clearly demonstrate your preferred format to minimize guesswork and ensure your needs are met effectively.

Tactic: Include details in your query to get more relevant answers

For a response that closely matches your needs, include all necessary details and context in your request.

OpenAI Examples:

Worse: How do I add numbers in Excel?
Better: How do I add up a row of dollar amounts in Excel? I want to do this automatically for a whole sheet of rows with all the totals ending up on the right in a column called "Total".

Worse: Summarize the meeting notes.
Better: Summarize the meeting notes in a single paragraph. Then write a markdown list of the speakers and each of their key points. Finally, list the next steps or action items suggested by the speakers, if any.

Additional Prompt examples:

Worse: What are the health benefits of tea?
Better: What are the specific health benefits of drinking green tea daily, especially regarding heart health and weight loss? Include any relevant scientific studies conducted in the past five years.

Worse: How do I fix a computer?

Better: How do I troubleshoot a Windows 10 computer that's not connecting to Wi-Fi? The computer shows other networks but won't connect to my home network. I've already tried restarting the router.

Worse: How to write a resignation letter?
Better: How do I write a professional resignation letter for a software engineering position, expressing gratitude for the opportunities but also explaining my departure due to relocation? Include a template focusing on maintaining a positive relationship with the employer.

Worse: Tips for traveling to France.
Better: What are essential tips for a first-time traveler to Paris, France, focusing on budget-friendly dining, must-see cultural landmarks, and navigating public transportation? Also, include advice on any current travel restrictions due to health concerns.

Worse: How do I plant a garden?
Better: What are the steps for starting a vegetable garden in a temperate climate zone? Include recommendations for beginner-friendly vegetables, soil preparation, and organic pest control methods suitable for a small backyard space.

Tactic: Ask the model to adopt a persona

You can direct the model to assume a certain persona, like being humorous, in its responses.

OpenAI example:

When I ask for help to write something, you will reply with a document that contains at least one joke or playful comment in every paragraph.
Write a thank you note to my steel bolt vendor for getting the delivery in on time and in short notice. This made it possible for us to deliver an important order.

10 Additional Persona Prompts for ChatGPT:

Encouraging Coach Persona:
"As an encouraging coach, give me some motivation for my upcoming exam, including positive affirmations."

Friendly Scientist Persona:
Explain to me how a rainbow is formed, in the style of a friendly scientist who adds fun scientific facts."

Wise Elder Persona:
As a wise elder, share your thoughts on the importance of lifelong learning.

Creative Chef Persona:
I have spinach, eggs, and cheese. As a creative chef, suggest an innovative recipe using these ingredients.

Adventurous Traveler Persona:
As an adventurous traveler, tell me about an unforgettable experience you had in a lesser-known destination.

Act as a Tech Startup Founder:
You are the founder of a tech startup specializing in AI-driven solutions. Describe your approach to securing venture capital funding, your vision for the company's growth, and how you plan to innovate in the competitive tech industry.

Act as a Marketing Director:
As a Marketing Director for a global fashion brand, outline your strategy for launching a new sustainable clothing line. Discuss your plans for market research, branding, digital marketing campaigns, and how you'll measure success.

Act as a Business Consultant:
Imagine yourself as a business consultant tasked with helping a struggling restaurant improve its profitability. Describe your analysis of the restaurant's current challenges, and propose a detailed plan for menu redesign, cost management, and customer engagement.

Act as an Investment Banker:
As an investment banker, present your strategy for advising a large corporation on a major merger. Include your evaluation of the financial benefits, risks involved, and how you would negotiate the best terms for your client.

Act as a Retail Manager:
You are the manager of a high-end retail store. Discuss your methods for increasing sales, enhancing customer experience, and managing a diverse team. Also, explain how you would handle a situation where sales targets are not being met.

Tactic: Use delimiters to clearly indicate distinct parts of the input

Triple quotation marks or title tags in a prompt can indicate that the enclosed text should be interpreted or formatted differently, a technique mainly useful for complex prompts rather than simple, single-sentence ones.

Example Prompts:

Haiku Summarization of a Text:
> Prompt: Summarize the following text into a haiku
> """[Insert Text Here]"""

Comparative Article Analysis:
> Compare these two articles and tell me which has the stronger argument:
> <article>[Insert First Article Here]</article>
> <article>[Insert Second Article Here]</article>

Thesis Title Evaluation and Suggestions:
> Evaluate this thesis title for its effectiveness and suggest five alternatives if needed:
> Abstract: [Insert Abstract Here]
> Title: [Insert Title Here]"

Recipe Instructions with Ingredients and Steps:
> Provide a recipe for [Dish Name], clearly separating the ingredients and the preparation steps:
> Ingredients:
> [List Ingredients Here]
> Steps:
> [List Steps Here]"

Event Planning with Requirements and Preferences:

> Plan an event, outlining both the mandatory requirements and optional preferences:
> Requirements:
> [List Requirements Here]
> Preferences:
> [List Preferences Here]"

Tactic: Specify the steps required to complete a task

Instead of using a large paragraph as a single prompt, you can ask for a sequence of steps and order of priority.

Example Prompts:

Summarize and Translate:
    Step 1: Summarize the following text in one sentence:
    """[Insert Text Here]"""
    Step 2: Translate the summary into French.

Analyze and Recommend:
    Step 1: Analyze the key themes in this movie plot:
    """[Insert Movie Plot Here]"""
    Step 2: Based on the analysis, recommend a similar movie.

Calculate and Explain:
    Step 1: Calculate the total cost of these items:
    """[List of Items and Prices Here]"""
    Step 2: Explain how you arrived at the total.

Research and Summarize:
    Step 1: Research the main events of the year 1969.
    Step 2: Provide a brief summary of these events.

Critique and Suggest Improvements:
    Step 1: Critique this short story for its character development:
    """[Insert Short Story Here]"""
    Step 2: Suggest two ways to enhance the character depth.

Tactic: Provide examples

Including an output example in your prompt guides the model to follow that style, a method known as few-shot prompting where multiple instructions are provided.

Philosophical Style Response:
    Prompt: Respond to these questions in a philosophical style, similar to the example given:

Example: Teach me about time.
Response: Time is like a river, constantly flowing, yet never the same in any two moments.
Question: Teach me about happiness.

Poetic Style Response:
Prompt: Answer these inquiries in a poetic style, following the style of the example:
Example: Describe a sunset.
Response: A sunset is a canvas painted with the vibrant hues of the day's end, a fleeting masterpiece in the sky.
Question: Describe a mountain."

Motivational Speaker Style Response:
Respond to these statements as a motivational speaker, using the example style:
Example: I feel like giving up.
Response: Every mountain peak is within reach if you just keep climbing.
Statement: I'm afraid of failure.

Wise Elder Style Response:
Prompt: Give answers in the style of a wise elder, as shown in the example:
Example: What is the secret to a long life?
Response: A long life is woven with the threads of laughter, love, and the wisdom to let go.
Question: What is the key to wisdom?

Storyteller Style Response:
Prompt: Tell these stories in a style similar to the provided example:
Example: Tell me a story about bravery.
Response: In a land of shadows, a young girl lit a candle, her small flame a beacon of courage in the dark.
Story Prompt: Tell me a story about friendship.

Tactic: Specify the desired length of the output

Specifying the desired output length, such as 50 words, 2 paragraphs, or 3 bullet points, often leads to more effective results.

50-Word Summary:
"Summarize the following text in about 50 words:
"""[Insert Text Here]""""

Two-Paragraph Summary:
    "Provide a summary of this text in two paragraphs:
    """[Insert Text Here]""""

Three Bullet Points Summary:
    "Summarize the following text in three bullet points:
    """[Insert Text Here]""""

Five-Sentence Explanation:
    "Explain the main idea of this text in five sentences:
    """[Insert Text Here]""""

One-Paragraph Overview:
    "Give an overview of this text in one paragraph:
    """[Insert Text Here]""""

——

2 - Strategy: Provide reference text

Tactic: Instruct the model to answer using a reference text

If you want to give a specific source in your output, this is a useful prompt to try out:
Prompt: Use the provided articles delimited by triple quotes to answer questions. If the answer cannot be found in the articles, write "I could not find an answer."

    Health Article Reference:
        "Using the information in the provided health article, answer the question below:
        """[Insert Health Article Here]"""
        Question: What are the benefits of a Mediterranean diet?"

    Historical Document Reference:
        "Refer to the details in this historical document to answer the following question:
        """[Insert Historical Document Here]"""
        Question: What were the main causes of World War II?"

    Scientific Study Reference:
        "Use the findings in this scientific study to answer the question:
        """[Insert Scientific Study Here]"""
        Question: How does climate change affect ocean temperatures?"

Technology Review Reference:
> "Answer this question based on the information in the technology review:
> """[Insert Technology Review Here]"""
> Question: What are the latest advancements in renewable energy?"

Literary Analysis Reference:
> "Using the insights from this literary analysis, respond to the question:
> """[Insert Literary Analysis Here]"""
> Question: What are the major themes in 'To Kill a Mockingbird'?"

Tactic: Instruct the model to answer with citations from a reference text

Prompt: You will be provided with a document delimited by triple quotes and a question. Your task is to answer the question using only the provided document and to cite the passage(s) of the document used to answer the question. If the document does not contain the information needed to answer this question then simply write: "Insufficient information." If an answer to the question is provided, it must be annotated with a citation. Use the following format to cite relevant passages ({"citation": …}).

Historical Event Inquiry:
> "Answer this question using the provided historical document and cite the relevant passage:
> """[Insert Historical Document Here]"""
> Question: How did the Treaty of Versailles contribute to World War II?
> Citation Format: {"citation": …}"

Scientific Concept Explanation:
> "Explain the following scientific concept using only the information in the provided study, and include a citation:
> """[Insert Scientific Study Here]"""
> Question: What is the process of photosynthesis?
> Citation Format: {"citation": …}"

Literature Analysis:
> "Analyze this literary theme based on the provided text, and cite the passages used:
> """[Insert Literary Text Here]"""
> Question: What role does symbolism play in 'The Great Gatsby'?
> Citation Format: {"citation": …}"

Business Strategy Discussion:

"Discuss the business strategy mentioned in the provided article and include a citation:

"""[Insert Business Article Here]"""

Question: What were the key factors behind the success of Apple Inc.?

Citation Format: {"citation": …}"

Environmental Issue Exploration:

"Explore the given environmental issue using the provided document, with a citation:

"""[Insert Environmental Report Here]"""

Question: What are the main causes of deforestation in the Amazon?

Citation Format: {"citation": …}"

----

3 - Strategy: Split complex tasks into simpler subtasks

Tactic: Use intent classification to identify the most relevant instructions for a user query

Customer Service - Technical Support:

"Classify this customer query and provide the next steps for technical support:

User Query: 'My phone won't connect to Wi-Fi.'

Next Steps:

Ask about recent changes to Wi-Fi settings.

Check if the phone's Wi-Fi is turned on.

Guide for a basic troubleshooting process."

Online Shopping Inquiry:

"Determine the type of online shopping query and suggest appropriate actions:

User Query: 'How do I return an item I purchased online?'

Actions:

Provide return policy details.

Give instructions for the return process.

Offer assistance with return label generation."

Travel Booking Support:

"Classify this travel-related question and outline steps to assist:

User Query: 'Can I change the dates on my flight booking?'
Assistance Steps:
Check if the ticket is changeable.
Inform about any potential fees.
Guide through the date change process."

Healthcare Appointment System:
"Identify the type of healthcare request and provide relevant instructions:
User Query: 'I need to reschedule my doctor's appointment.'
Instructions:
Ask for the original appointment date.
Provide available slots for rescheduling.
Confirm the new appointment time."

Educational Course Inquiry:
"Categorize the education-related question and provide the next steps:
User Query: 'What courses are required for a Biology major?'
Next Steps:
List core Biology courses.
Mention elective options.
Direct to academic advising for more guidance."

Tactic: For dialogue applications that require very long conversations, summarize or filter previous dialogue

(Mainly for developers)

Large language models like ChatGPT have limited memory and may not remember everything in long conversations, so it's advised to summarize previous messages at the start of new ones.

Customer Support Follow-Up:
"Provide a brief summary of our previous conversation regarding your technical issue and state your current query:
Previous Conversation Summary: [Insert Summary]
Current Query: [Insert Query]"

Therapy Session Continuation:
"Summarize the key points from our last therapy session and mention any new concerns or developments you'd like to discuss today:
Last Session Summary: [Insert Summary]

New Concerns: [Insert Concerns]"

Educational Tutoring Session:
"Recap our last tutoring session's main topics and ask your specific question for today's session:
Last Session Recap: [Insert Recap]
Question for Today: [Insert Question]"

Project Update Meeting:
"Summarize the progress and discussion points from the last project meeting and outline the main agenda for today's meeting:
Last Meeting Summary: [Insert Summary]
Today's Agenda: [Insert Agenda]"

Ongoing Legal Consultation:
"Briefly summarize the previous legal advice given and state the new legal question or update you have:
Previous Legal Advice Summary: [Insert Summary]
New Legal Query/Update: [Insert Query/Update]"

Tactic: Summarize long documents piecewise and construct a full summary recursively

To summarize a very long document such as a book we can use a sequence of queries to summarize each section of the document.

"Summarize Chapter 1 of [Book Title], highlighting the introduction of main characters and the setting. Outline any key events that set the stage for the story."

"Provide a summary of Chapter 5 of [Book Title], focusing on the major plot development in this chapter. Include details about any significant conflicts or turning points for the characters."

"Summarize the middle section of [Book Title], covering chapters 10 to 12. Concentrate on the evolution of the main character's journey and the development of central themes."

"Provide an overview of Chapter 20 of [Book Title], detailing the climax of the story. Discuss how the conflicts are addressed and the impact on the main characters."

"Summarize the final chapter of [Book Title]. Focus on how the story concludes, the resolution of major plot lines, and any final character developments."

----

4 - Strategy: Give models time to "think"

Tactic: Instruct the model to work out its own solution before rushing to a conclusion

Here are a few prompt examples:

Math Problem Evaluation

"First, solve the following problem independently: [Problem Statement]. After solving, compare your solution with the student's solution provided: [Student's Solution]. Identify any discrepancies and explain why they may have occurred."

Historical Analysis

"Before evaluating the accuracy of a student's historical essay, provide a brief summary of the key events and context of [Historical Topic]. Then, read the student's essay: [Student's Essay]. Compare your summary with the essay and assess its historical accuracy."

Scientific Concept Explanation

"Explain the scientific principles underlying [Scientific Concept] in your own words first. Then, review the student's explanation of the same concept: [Student's Explanation]. Evaluate the correctness and completeness of the student's explanation compared to your own."

Literary Interpretation

"Analyze the themes and character development in [Literary Work] as you understand them. Next, read the student's interpretation: [Student's Interpretation]. Compare your analysis with the student's and critique the accuracy and depth of their interpretation."

Statistical Data Analysis

● "First, perform your own analysis of the following data set: [Data Set Details]. After completing your analysis, examine the student's analysis: [Student's Analysis]. Compare the two analyses to determine the accuracy and thoroughness of the student's work."

Tactic: Use inner monologue or a sequence of queries to hide the model's reasoning process

For many situations where you only need the answer without the reasoning, specific prompts can be used to skip the explanation and get straight to the point.

Follow these steps to answer the user queries.

Step 1 - First work out your own solution to the problem. Don't rely on the student's solution since it may be incorrect. Enclose all your work for this step within triple quotes (""").

Step 2 - Compare your solution to the student's solution and evaluate if the student's solution is correct or not. Enclose all your work for this step within triple quotes (""").

Step 3 - If the student made a mistake, determine what hint you could give the student without giving away the answer. Enclose all your work for this step within triple quotes (""").

Step 4 - If the student made a mistake, provide the hint from the previous step to the student (outside of triple quotes). Instead of writing "Step 4 - ..." write "Hint:".

Tactic: Ask the model if it missed anything on previous passes

To ensure a model extracts all relevant parts from a large document, ask follow-up questions if it stops too soon, prompting it to continue searching for any missed sections.

Historical Document Analysis
"After reviewing the provided historical document, list any additional excerpts that relate to the question 'How did [Historical Event] impact global politics?' Ensure each excerpt is complete and contextual."

Scientific Research Summary
"Having gone through the scientific paper, identify more excerpts that answer 'What are the key findings of [Research Topic]?' Avoid repeating previously listed excerpts and provide full context."

Literary Theme Exploration
"Re-examine the literary work for more excerpts that illustrate the theme of [Theme, e.g., 'redemption']. Ensure the excerpts are comprehensive and avoid duplication from earlier responses."

Business Case Study Review

"Look again at the business case study. Find additional excerpts that answer 'What were the main strategies used in [Company's] turnaround?' Provide excerpts with complete context and no repetition."

Legal Document Examination
"Review the legal document once more for any other relevant excerpts addressing 'How does this case interpret [Specific Law or Regulation]?' Ensure the excerpts are full and contextually complete without repeating previous selections."

----

5 - Strategy: Use external tools

(Mainly for developers)

Tactic: Use embeddings-based search to implement efficient knowledge retrieval

Giving a model additional information, like actors and directors for movie queries, improves its accuracy. Non-technical users can best achieve this by using Custom GPTs, which allow incorporating a specific knowledge base for more precise answers.

Tactic: Use code execution to perform more accurate calculations or call external APIs

Tactic: Give the model access to specific functions

----

6 - Strategy: Test changes systematically

When altering your prompts, make sure you test them in a way that can make the results clear to evaluate.

Using tests that match real use.
Having enough tests to be sure of the results.
Making tests repeatable.

Tactic: Evaluate model outputs with reference to gold-standard answers

When evaluating answers given by a model, we compare them to a set of known, correct facts (gold-standard answers). For example, if the question is about Neil Armstrong's moon landing, we check if the model's answer includes key facts like "Neil Armstrong was the first on the moon" and "He landed on July 21, 1969."

Simple Prompt Template for Fact Check Evaluation

List Key Facts:
"Fact 1: [Insert Fact]"
"Fact 2: [Insert Fact]"
"[Add more if needed]"

Insert Model's Answer:
"Answer given by the model: [Insert Answer]"

Evaluate Each Fact:
"Does the answer correctly mention Fact 1? Yes/No"
"Does the answer correctly mention Fact 2? Yes/No"
"[Continue for additional facts]"

Count Correct Facts:
"Number of correct facts in the answer: [Total Count]"

Master ChatGPT, Midjourney, and the Top 50 AI tools and 10X your productivity with our comprehensive, beginner-friendly courses!

www.skillleap.ai

SKILL LEAP AI