

Prompt Engineering Quick Guide



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Prompt Engineering Quick-Guide

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Welcome to the FlowGPT Quick-Guide, this guide will introduce you to the concept of Prompt Engineering, enabling you to engage more effectively with the FlowGPT platform and the world of prompting. You'll mainly learn what a prompt is and how to develop better prompts.

What is a Prompt?

In the context of interacting with ChatGPT, every single message you send is known as a '**prompt**'. This message serves as the **input**, and in response, ChatGPT generates a meaningful **output**.

User Input (Prompt)	What is 1+1?
ChatGPT Output	The sum of 1 and 1 is 2.

ChatGPT reacting with an output to the user input (prompt).

The Power of Longer Prompts

Often the prompts we see are very short and contain little information, because we tend to think that ChatGPT has a deep knowledge of many topics, and indeed, this is true. However, this does not mean that we should use this as an excuse for limitation. When creating prompts for ChatGPT, consider three key aspects: length, coherence, and quantity of information. These aspects are interconnected, like the angles of a triangle. Missing one makes it no longer a triangle, indicating something is amiss. Here's how to navigate these considerations:

1. Avoid short, vague phrases. Instead, use longer, clear sentences to prevent misunderstandings.
2. Maintain coherence between sentences, ensuring a logical flow from one to the next.
3. Don't limit information based on assumptions about ChatGPT's knowledge. However, token limits exist, affecting comprehension. Too many tokens may hinder the model's performance.

Now, I know what you're thinking: "*Bro, the first and third points don't make any sense, they contradict each other*". About the apparent contradiction between points one and three, let me explain further. The goal is to strike a balance. Providing ample information doesn't mean turning sentences into poems. We must strategically find ways to deliver unambiguous, concise sentences, utilizing tokens effectively.

Longer User Input (Prompt)	What is 1+1? Explain in simple words.
ChatGPT Better Output	1+1 equals 2. When you have one thing and you add another thing to it, you end up with two things in total. So, when you put together one apple with another apple, you have two apples. Similarly, when you add one toy car with another toy car, you have two toy cars. That's how 1+1 equals 2.

Use longer inputs (prompts) for better outputs.

Understanding the AI's Limitations

While AI models like ChatGPT have made significant strides in natural language understanding and generation, it's important to remember that they still have limitations. Understanding these limitations can help you craft more effective prompts and set realistic expectations for the AI's responses.

Limitation: Lack of real-world knowledge.

Solution: Integrate real-time information.

Limitation: Limited Understanding of Context.

Solution: Enhance context understanding to improve coherence and relevance in responses.

Limitation: Dependence on Training Data.

Solution: Explore methods for reducing dependency on training data and improving generalization capabilities.

Limitation: Tendency to be verbose.

Solution: Implement length control or response summarization.

Limitation: Sensitivity to input phrasing.

Solution: Practice with diverse prompts to handle various input styles.

Limitation: Lack of critical thinking.

Solution: Implement a list of person discussing your questions and let them provide an answer at the end.

Limitation: Difficulty in handling ambiguous queries.

Solution: Enhance clarification and disambiguation strategies.

Limitation: Inability to perform actions in the physical world.

Solution: Avoid verbs directed at the intention to perform an action.

Limitation: Limited memory and conversation context.

Solution: Improve context and output management for better conversation continuity.

Limitation: Lack of emotional understanding.

Solution: Integrate emotion recognition examples for better emotional responses.

Note: These are not all the limitations of ChatGPT. We have chosen to mention only a few of the most important ones to avoid making the list too long. If you are interested in knowing the rest of the limitations, please copy these, paste them into ChatGPT, and ask it to continue the list.

Now, let's explore the first three limitations. (You can ask ChatGPT to delve into others on the list.)

1. Lack of Real-Time and Personal Context

Firstly, AI models do not have access to **real-time or personal data** unless it's explicitly provided in the conversation. They don't know who you are, where you are, or what time it is. For example, if you ask the AI, "What's the weather like outside?", it won't be able to provide an accurate answer because it doesn't know your location, and doesn't have access to information about the current weather.

User Input (Prompt)	What's the weather like outside?
ChatGPT Output	I'm sorry, but as an AI, I don't have access to real-time data or personal context to provide the current weather.

ChatGPT doesn't have access to information like your location and current weather because it doesn't have personal context.

2. Limited Understanding of Context

While AI models can understand and generate language based on the prompts they receive, they **don't understand context in the same way humans do**. They analyze the input text and generate responses based on patterns they've learned during training, but they don't have a true understanding of the world or the ability to reason in the same way humans do.

For example, if you ask the AI a question about a complex, nuanced topic, it may not be able to provide a satisfactory answer because it doesn't truly understand the topic. It's simply generating a response based on patterns it's seen in the data it was trained on.

3. Dependence on Training Data

The AI's responses are entirely dependent on the **data it was trained on**. If the AI makes a factual error in its response, it's likely because of an error in the training data. Similarly, if the AI doesn't understand a certain term or concept, it's probably because that term or concept wasn't adequately represented in the training data.

To overcome this problem, you can train the model on your own data. By providing it with personalized and relevant examples, you can help improve its performance for your specific use case. This allows you to tailor the model to better understand your

preferences, context, and specific domain knowledge, potentially reducing the impact of the dependence on generic training data.

Understanding these limitations can help you craft more effective prompts and set realistic expectations for the AI's responses. In the next section, we'll discuss some best practices for prompt engineering that can help you get the most out of your interactions with AI models.

User Input (Prompt)	Who won the World Cup in 2022?
ChatGPT Output	I'm sorry, but as an AI model trained by OpenAI, my training only includes knowledge up until September 2021, and I don't have the ability to access or retrieve real-time information.

ChatGPT doesn't know events beyond its last training data cut-off.

Understanding these limitations can help you craft more effective prompts and set realistic expectations for the AI's responses. In the next section, we'll discuss some best practices for prompt engineering that can help you get the most out of your interactions with AI models.

Best Strategies for Prompt Engineering

Crafting effective prompts is both an art and a science. Here are some strategies that can help you get the most out of your interactions with AI models like ChatGPT.

1. Role-Playing Prompts

One effective strategy is to use **role-playing prompts**. This involves instructing the AI to **"act as"** a certain character or entity. When you do this, the AI will generate responses that are in line with the character or entity's typical behavior, as far as it understands from its training data.

User Input (Prompt)	Act as a Shakespearean actor. What is your favorite line?
ChatGPT Output	Forsooth, mine favorite line doth

come from 'Romeo and Juliet':
“Parting is such sweet sorrow, that I shall say good night till it be morrow.”

ChatGPT generates a response that mimics the language and style of Shakespearean drama.

1. Setting Up a Game or Scenario

Another effective strategy is to set up a **game or scenario** at the beginning of your prompt. This involves providing the AI with a set of rules or a context to follow throughout the conversation. When you do this, the AI will generate responses that adhere to the rules or context you've provided.

User Input (Prompt)	Let's play a game. You will act as a detective in a murder mystery. What's the first thing you do at the crime scene?
ChatGPT Output	As a detective, the first thing I would do at a crime scene is to ensure it's secure. I would then proceed to observe the scene without touching anything, looking for any immediate signs of struggle, the victim's cause of death, and potential clues left behind by the perpetrator.

ChatGPT generates a response that aligns with the role and scenario you've set up.

Advanced Techniques and Markdown

As you become more comfortable with prompt engineering, you can start to explore advanced techniques and use markdown to enhance your interactions with ChatGPT.

Advanced Game Technique Setup

In addition to setting up a game or scenario, you can also provide a set of **rules and a game goal** to guide the AI's responses. This gives the AI more context and helps it generate responses that are more closely aligned with your needs.

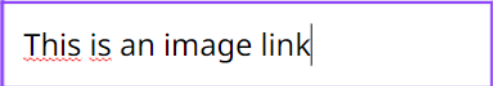

<p>User Input (Prompt)</p>	<p>Let's play a game. You will act as a math teacher, and help me with my homework.</p> <p>Game goal:</p> <p>The goal of this game is that you will help me with math, and explain everything in simple words for me to understand how things work.</p> <p>Rules:</p> <ul style="list-style-type: none"> - Keep acting as the math teacher. - Explain in simple words. - In your explanations, give examples and generate practice exercises.
<p>ChatGPT Output</p>	<p>Sure, I'd be happy to help you with your math homework! As your math teacher, I'll do my best to explain concepts in simple terms and provide examples and practice exercises to help you understand. Please let me know what specific math topic or problem you need assistance with, and we can get started!</p>

Include “game: rules and the “game” goal in your prompt, to guide ChatGPT its responses.

Using Markdown in ChatGPT

Markdown is a lightweight markup language that you can use to add formatting elements to plaintext text documents. You can use markdown to format your prompts and the AI's responses. There are much different ways to use markdown, but we're going to show the ones that you will use the most.

Markdown Input	ChatGPT Output
Display “ This is a bold text ”	This is a bold text
Display “ <i>This is an italic text</i> ”	<i>This is an italic text</i>

Display “ <code>~~This is a strikethrough text~~</code> ”	This is a strikethrough text
Display “ <code>[link](https://www.example.com)</code> ”	this is a link text
Display “ <code>![Description](image_URL)</code> ”	
Display “ <code># This is a heading</code> ”	This is a heading
Display “ <code>![image](https://i.ibb.co/grFjnhp/IMG-2466.webp)</code> ”	
Display “ <code>```This is a code block```</code> ”	<pre>css Copy code This is a code block</pre>

The input and output using Markdown.

Determining the Outputs

As you become more proficient in Prompt Engineering, you can start to shape the outputs of ChatGPT more precisely, enhancing the user experience.

Guiding the First Output

You can **guide the first output** from ChatGPT by specifying it at the end of your prompt. This can be particularly effective when you want the first output to serve as a title or introduction.

User Input (Prompt)	Your first output will only display the title “ # Hello! ”, and the description “This is an example .”
ChatGPT Output	Hello! This is an example .

By telling what the first output should be, can you determinate ChatGPT its first output.

Explain What a Output Should Contain

You can also guide the structure of the AI's outputs by **specifying what each output should contain**. This can be especially useful when you want the AI's responses to follow a specific format.

User Input (Prompt)	Beside of the first output, all your other outputs will contain: - “ Title: ” the title of the YouTube video. - “ Description: ” the description of the YouTube video. - “ Script: ” the actual script for the YouTube video.
ChatGPT Output (not exactly)	Title: <the title> Description: <the description> Script: <the script>


Determinate an output, by telling what it should contain.

Congrats, you've finished our quick Prompt Engineering Guide!

If you want to learn more, check this more detailed guide: <https://guide.flowgpt.com/>


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- **Discord:** creativegpt#0000 and aidouwe#0000