

# Prompt for code(hdl etc) generation

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## Prompt Engineering Guide(Web Page)

<https://www.promptingguide.ai/applications/coding>

## Improving ChatGPT Prompt for Code Generation(Arxiv)

<https://arxiv.org/abs/2305.08360>

## Create prompts to generate code-Vertex AI(Web Page)

<https://cloud.google.com/vertex-ai/docs/generative-ai/code/code-generation-prompts>

## Prompt Engineering-Microsoft CodeX(Web Page)

<https://microsoft.github.io/prompt-engineering/>

## Prompting ChatGPT for Python Code Generation: An Effective Framework(Blog)

<https://artificialcorner.com/prompting-chatgpt-for-python-code-generation-an-effective-framework-e323b2d24987>

## 50 Chat GPT Prompts Every Software Developer Should Know (Web Page)

[https://dev.to/hackertab\\_org/50-chat-gpt-prompts-every-software-developer-should-know-tested-9a1](https://dev.to/hackertab_org/50-chat-gpt-prompts-every-software-developer-should-know-tested-9a1)

## ChatGPT Prompts for Coding – Master Coding Faster with 200 Prompts

<https://chatgptconnect.com/chatgpt-prompts-for-coding-software-developer/#code-readability-and-style>

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## Basic framework of a prompt

- **Instruction:** Specific tasks you want hope to execute.
  - **Context:** Background(or Context more precisely) information, which could guide LLMs respond better.
  - **Input Data:** The data that you hope LLMs to process.
  - **Output Indicator:** Data type and format hoped.
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## 1. Write clear and specific instructions

### Use delimiters

- Delimiters can be anything like:

```
` ` , " " , < > , `<tag> </tag>` , `:`
```

### Ask for structured output

```
HTML, JSON
```

### Check whether conditions are satisfied

### Few-show learning

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## 2. Give the model time to "think"

Specify the steps required to complete a task

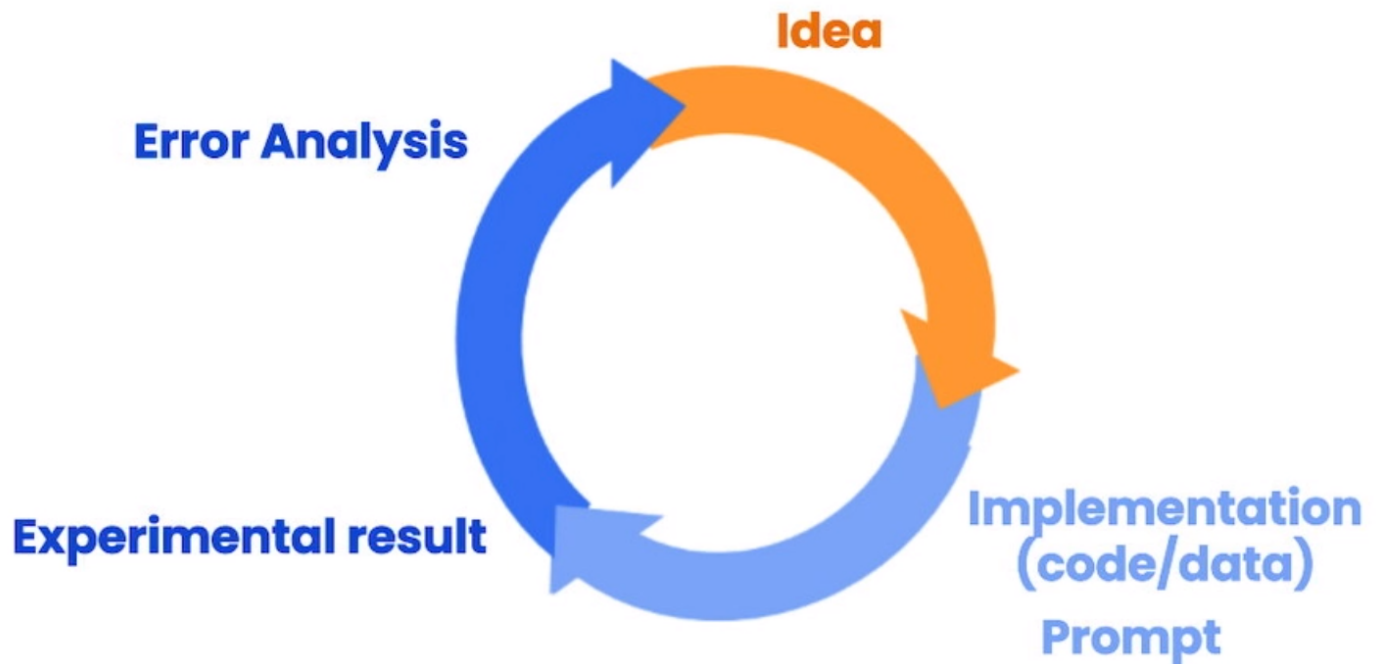
Ask for output in a specified format

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

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### 3. Iterative Prompt Development

## Iterative Prompt Development



### Prompt guidelines

- Be clear and specific
- Analyze why result does not give desired output.
- Refine the idea and the prompt
- Repeat

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### 4. Tell the big model what to do instead of what not to do

Another common trick when designing cues is to avoid saying what not to do, and instead say what to do. This encourages being more specific and focusing on the details that lead to a good response from the model.

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## 5. Prompt of thought chain

Chain of Thinking (CoT) hints introduced in [Wei et al. (2022) (opens in a new tab)](<https://arxiv.org/abs/2201.11903>) through intermediate reasoning steps Sophisticated reasoning capabilities are achieved, enabling more complex tasks to be performed in this way.

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## 6. Prompt designed for programming

- **Code Generation** Generate a boilerplate [language] code for a [class/module/component] named [name] with the following functionality: [functionality description].
- **Bug Detection** Analyze the given [language] code and suggest improvements to prevent [error type]: [code snippet].
- **Automated Testing** Generate test cases for the following [language] function based on the input parameters and expected output: [function signature].
- **Code Completion** In [language], complete the following code snippet that initializes a [data structure] with [values]: [code snippet].
- **Code Review** Review the following [language] code for best practices and suggest improvements: [code snippet].

ref:[https://dev.to/hackertab\\_org/50-chat-gpt-prompts-every-software-developer-should-know-tested-9a1](https://dev.to/hackertab_org/50-chat-gpt-prompts-every-software-developer-should-know-tested-9a1)