ChatGPT: Prompt Engineering and Example Prompts

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Prompt 1: Testing Generative AI with Dall-e 3

Example Prompt
Can you list three impacts of generative AI on cats' relationships with each other and generate images on this concept.

Element of a Prompt

A prompt contains any of the following elements:

Instruction : a specific task or instruction you want the model to perform

Context : external information or additional context that can steer the model to better responses

Input Data (Examples) : the input or question that we are interested to find a response for

Output Indicator : the type or format of the output.

Example Prompt

Write a love poem titled "Love of My Life" for my wife, Rebecca's birthday on August 5th like the following example

Example:

Once upon a midnight dreary, while I pondered, weak and weary,

Over many a quaint and curious volume of forgotten lore—

While I nodded, nearly napping, suddenly there came a tapping,

As of some one gently rapping, rapping at my chamber door.

"'Tis some visiter," I muttered, "tapping at my chamber door—

Only this and nothing more."

Title: Love of My Life

1 - Zero-Shot Prompting

Use it for simple task

Example Prompt
Classify into three categories: neutral, negative or positive. Text: One of the best professors i've had at Elon, he is fantastic and clearly cares so much and put so much effort into the class. His lectures are engaging and have a lot of participation aspects. The homework is pretty minimal and the final project is not too bad but the quizzes are only based on the readings so make sure you do them. Sentiment:

2 - Few-Shot Prompting

Use it for complex problem

Example Prompt – Bad Prompt

Please decipher the following writing:

hwt xh epxcixcv p exrijgt. >>>

In the second stage, add the following content to improve accuracy.

Example Prompt – Good Prompt

Please use the following context to decipher the text:

iwt hjc xh hwxcxcv qgxvwian. >>> The sun is shining brightly.
rpih pgt vgtpi etih. >>> Cats are great pets.
x tcydn gtpsxcv qddzh. >>> I enjoy reading books.
hwt eapnh iwt expcd qtpjixujaan. >>> She plays the piano beautifully.
wt pit pc peeat udg ajcrw. >>> He ate an apple for lunch.
wt xh epxcixcv >>> He is painting
p exrijgt dc iwt lpaa. >>> A picture on the wall.
lt lpazts id iwt epgz. >>> We walked to the park.
xi xh p hjccn spn. >>> It is a sunny day.
iwxh xh bn upkdgxit hwxgi. >>> This is my favorite shirt.
iwtn pgt eapnxcv hdrrtg. >>> They are playing soccer.
hwt xh epxcixcv p exrijgt. >>>

3 - Chain-of-Thought Prompting

Tell the machine to show the explicit reasoning steps to increase accuracy

Example Prompt – Bad Prompt

I went to the market and bought 10 apples. I gave 2 apples to the neighbor and 2 to the repairman. I then went and bought 5 more apples and ate 1. How many apples remain?

Just only write the answer as a number. Such as "8".

Add the key word, "Let's think step-by-step" or "Let's take a deep breath and think step-by-step"

Example Prompt – Good Prompt

I went to the market and bought 10 apples. I gave 2 apples to the neighbor and 2 to the repairman. I then went and bought 5 more apples and ate 1. How many apples remain?

Let's think step by step.

Example Prompt – Example Party Prompt with Chain-of-Though

Prompt 1-

- Let's come up with 5 creative and fun party ideas at Elon University, NC. Ideas should be unique and never done before.

- Let's take a deep breath and think step-by-step.

Prompt 2-

-Based on the second idea, please write a short plan to present the student's life Dean.

-Explain why this party would be very interesting for college students to the Dean.

-Keep it simple and easy to read.

-Make it one page long.

Prompt 3-

- Make the goals concrete and assign these goals to each of our group members. We have three people, Mike, Jenny, Hyung.

Prompt 4

- Based on the party information above, please generate our party advertisement hands-out.

- Keep the writing catchy and short, use some fun stuff.

- After the hands-outs, create four different images by using a diverse set of artistic styles. Images should be creative and funny.

Good and Bad Prompt Examples

Worse	Better
How do I add numbers in Excel?	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".
Who's president?	Who was the president of Mexico in 2021, and how frequently are elections held?
Write code to calculate the Fibonacci sequence.	Write a TypeScript function to efficiently calculate the Fibonacci sequence. Comment the code liberally to explain what each piece does and why it's written that way.
Summarize the meeting notes.	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.

Application of Prompt Engineering to Generate a Web App

TEMP API:

PROMPT 1:

- Let's create a simple webpage that will generate **meal ideas** for the items that I have in my home.

- To create the meal ideas, we will use OpenAI's chatCompletion API.

- Please first write all specs in the bullet point format and wait for my next instruction.

PROMPT 2:

By using the above specs, please follow the following instructions.

The user will input from the user input text area, and we will feed the data from this input to the API. After inputs, it will return API from OPEN AI.

Make sure that you show the return text with a line break, and when the user submits a request, they can see a waiting indicator.

For waiting indicator, do not use GIF. Use only JavaScript.

Finally, write the JavaScript code. To write the code, please use the example API from OpenAI below. I will add an API key later. This is a secure-prototype, not publically availble. Do not use node.js.

Example API Call and Response

```
curl https://api.openai.com/v1/chat/completions \
  -H "Content-Type: application/json" \
  -H "Authorization: Bearer $OPENAI_API_KEY" \
  -d '{
    "model": "gpt-3.5-turbo-16k",
    "messages": [
     {
       "role": "system",
       "content": "You are a helpful assistant."
     },
```

```
  {
    "role": "user",
    "content": "Hello!"
  }
 ]
}'
RESPONSE
{
 "id": "chatcmpl-123",
 "object": "chat.completion",
 "created": 1677652288,
 "model": "gpt-3.5-turbo-0613",
 "choices": [{
  "index": 0,
  "message": {
   "role": "assistant",
   "content": "\n\nHello there, how may I assist you today?",
  },
  "finish_reason": "stop"
 }],
 "usage": {
  "prompt_tokens": 9,
  "completion_tokens": 12,
  "total_tokens": 21
 }
}
```

Example Ends

- Let's go step by step and first write the actions that you will take and then take the each actions.

Prompt 3:

Let's make the style of the website with CSS. CSS should be funky and vibrant, showing the spirit of our website.

Prompt 4:

Please put HTML, JavaScript, and CSS code in a single html file.