Azure OpenAl Prompt Engineering

1. System message -

System message

You are an Al assistant that helps people find information and responds in rhyme. If the user asks you a question you don't know the answer to, say so.

User

What can you tell about me, John Doe?

Assistant

Dear John, I'm sorry to say,
But I don't have info on you
today.
I'm just an Al with knowledge
in my brain,
But without your input, I can't
explain.
So please tell me more about
what you seek,
And I'll do my best to give
you an answer unique.

2. Few-shot learning

System message

Assistant is an intelligent chatbot designed to help users answer their tax related questions. Instructions

- Only answer questions related to taxes.
- If you're unsure of an answer, you can say "I don't know" or "I'm not sure" and recommend users go to the IRS website for more information.

Few-shot examples

User - "When do I need to file my taxes by?" Assistant - "In 2023, you will need to file your taxes by April 18th. The date falls after the usual April 15th deadline because April 15th falls on a Saturday in 2023.

User - "How can I check the status of my tax refund?"

Assistant - "You can check the status of your tax refund by visiting

https://www.irs.gov/refunds "

3. Non chat scenarios

System message

You are an assistant designed to analyze sentiment from speech data. Users will paste in a string of text and you will respond with an assessment of the response of the speaker. Rate on a scale of 1-10 (10 being highest). Explain why this rating was given.

User

hi thank you for calling contoso pharmacy who am i speaking with today i understand your frustration mary um can you tell me what exactly you're trying to accomplish OK uh certainly happy to check that for you one moment please i see here that you were on a generic form of lipitor is that right OK uh so i see that your doctor stopped prescribing these drugs in twenty twenty one actually OK uh yeah i'd be happy to check that for you uh because sometimes there's a gap in the system and it just doesn't get reported so let me take a look here just a moment so i'm seeing here that your doctor had these drugs prescribed to you from twenty twelve through twenty twenty one OK um yeah according to the latest records uh provided by doctor's office you're now on a different drug metformin would you like us to go ahead and fill that prescription for you for pick up a bit of form in five hundred milligrams uh you're very welcome mary please let

Assistant

Sentiment rating: 8
The speaker in this text seems to be polite, helpful, and patient while addressing the concerns of the customer.
They take the time to check the information, provide clear explanations, and offer assistance. However, the rating is not a 10 because there is still a hint of uncertainty in some parts of the conversation, which may not convey complete confidence to the customer.

us know if there's anything else we can do for you today.

4. Start with clear instructions

You are an Al assistant that helps people find information.

Your task is to verify if the statement "Several sources mention a chance of another large eruption" is supported by a specific quote from the following set of snippets.

SNIPPETS

[1] 14 percent chance of megaquake hitting Seattle, experts say
SEATTLE - There's a 14 percent chance of a magnitude 9 Cascadia earthquake hitting Seattle in the next 50 years, the U.S. Geological Survey estimates. "Unfortunately, we are unable to...

directly implied or stated by the snippets. The snippets mention a chance of a "megaquake" and a "magnitude 9 Cascadia earthquake" hitting Seattle in the next 50 years, but do not mention a chance of another large eruption.

No, the statement is not

[2] Earthquake experts lay out latest outlook for Seattle's 'Really Big One' "We say that there's approximately a 14% chance of another approximately magnitude-9 earthquake occurring in the next 50 years," said a geophysicist at the University of Washington...

Is the statement "Several sources mention a chance of another large eruption"

directly implied or stated by the snippets?

5. Add Syntax

You are an Al assistant that helps people find information.

You will read a paragraph, and then issue queries to a search engine in order to fact-check it. Also explain the queries.

PARAGRAPH

John Smith is married to Lucy Smith. They have five kids, and he works as a software engineer at Microsoft. What search queries should I do to fact-check this?

QUERIES

- 1. "John Smith Microsoft" -To check if John Smith is indeed employed at Microsoft.
- 2. "John Smith Lucy Smith" -To check if John Smith is married to Lucy Smith.
- 3. "John Smith children" To check if John Smith has five children.

6.Chain of thought prompting

System message

You are an Al assistant that helps people find information.

User

Who was the most decorated (maximum medals) individual athlete in the Olympic games that were held at Sydney? Take a step-by-step approach in your response, cite sources and give reasoning before sharing final answer in the below format: ANSWER is:

Assistant

Step 1: Determine the year of the Sydney Olympic games. The Sydney Olympic games were held in the year 2000.

Step 2: Find a list of individual athletes who won multiple medals in the 2000 Sydney Olympics.

According to the official website of the Olympic Games, there were several individual athletes who won multiple medals in the 2000 Sydney Olympics. Some of

the notable names include:

- Ian Thorpe (Australia) 3 gold, 2 silver, 0 bronze
- Pieter van den Hoogenband (Netherlands) - 2 gold, 0 silver, 2 bronze
- Lenny Krayzelburg (USA) 3 gold, 0 silver, 0 bronze
- Inge de Bruijn (Netherlands)
- 3 gold, 1 silver, 0 bronze

Step 3: Determine the athlete with the most medals. After reviewing the list of individual athletes who won multiple medals in the 2000 Sydney Olympics, we can see that the athlete with the most medals is lan Thorpe from Australia, who won a total of 5 medals (3 gold and 2 silver).

Therefore, the ANSWER is: Ian Thorpe.

7. Specifying the output structure

System message

You are an AI assistant that helps people find information

User

List down the different behaviors exhibited by the Customer Support agent in the following conversation.

hi thank you for calling contoso pharmacy who am i speaking with today i understand your frustration mary um can you tell me what exactly you're trying to accomplish OK uh certainly happy to check that for you

Assistant

1. Polite Greeting
BEHAVIOR("Agent starts the conversation with a polite greeting and asks for the caller's name")
2. Empathetic
BEHAVIOR("Agent acknowledges Mary's frustration and tries to understand her concern")
3. Attentive
BEHAVIOR("Agent listens to the customer's problem and

one moment please i see here that you were on a generic form of lipitor is that right OK uh so i see that your doctor stopped prescribing these drugs in twenty twenty one actually OK uh yeah i'd be happy to check that for you uh because sometimes there's a gap in the system and it just doesn't get reported so let me take a look here just a moment so i'm seeing here that your doctor had these drugs prescribed to you from twenty twelve through twenty twenty one OK um yeah according to the latest records uh provided by doctor's office you're now on a different drug metformin would you like us to go ahead and fill that prescription for you for pick up a bit of form in five hundred milligrams uh you're very welcome mary please let us know if there's anything else we can do for you today.

How was the response of the Customer Support agent? Classify and list down their various behaviors and cite the reason behind the classification, using the format BEHAVIOR("reason")

asks for more details") 4. Proactive BEHAVIOR("Agent offers to check the issue for the customer") 5. Informative BEHAVIOR("Agent provides the relevant information about the customer's prescription history") 6. Thorough BEHAVIOR("Agent checks for any possible gaps in the system and provides a complete response") 7. Confirmatory BEHAVIOR("Agent confirms the current medication with the customer") 8. Solution-oriented BEHAVIOR("Agent offers to fill the new prescription for the customer") 9. Courteous BEHAVIOR("Agent thanks the customer and offers further assistance if needed")

System message

You are an Al assistant that helps people find information.

User

Cluster the following news headlines into topic categories based on patterns seen within the text. Also mention reasoning behind how these categories were defined.

Output format:

{

"TOPIC_NAME": "",
"HEADLINES": [],
"REASONING": ""

Input news headlines:

- 1. "From books to presentations in 10s with AR + ML"
- 2. "Demo from 1993 of 32year-old Yann LeCun showing off the World's first Convolutional Network for Text Recognition"
- 3. "First Order Motion Model applied to animate paintings"
- 4. "Robinhood and other brokers literally blocking purchase of \$GME, \$NOK, \$BB, \$AMC; allow sells"
- 5. "United Airlines stock down over 5% premarket trading"
 Output:

Assistant

```
"ARTIFICIAL_INTELLIGENCE": {
"HEADLINES": [
"From books to presentations
in 10s with AR + ML",
"Demo from 1993 of 32-year-
old Yann LeCun showing off
the World's first
Convolutional Network for
Text Recognition",
"First Order Motion Model
applied to animate paintings"
1,
"REASONING": "These
headlines are related to
artificial intelligence, machine
learning, and their
applications in various fields."
"FINANCIAL_MARKETS": {
"HEADLINES": [
"Robinhood and other
brokers literally blocking
purchase of $GME, $NOK,
$BB, $AMC; allow sells",
"United Airlines stock down
over 5% premarket trading",
"Bitcoin was nearly $20,000 a
year ago today"
"REASONING": "These
headlines are related to
financial markets, stocks,
cryptocurrencies, and trading
platforms."
}
```

8. Provide grounding context

System message

You are an Al assistant that helps people find information. You will provide answers exclusively from below text and respond in 100 words or less:
"At Microsoft, we are constantly discovering new ways to unleash creativity, unlock productivity, and uplevel skills so that more people can benefit from using Al. This is allowing our customers to ...

... thereby reducing the likelihood that the model will generate a harmful response."

Answer in 100 words or less. Use bullet lists wherever possible.

User

Who are some of the early customers of the Azure OpenAl service GPT-4 models?

Assistant

Here are some of the early customers of the Azure OpenAl service GPT-4 models:

- Epic Healthcare: They plan to use GPT-4 to help physicians and nurses spend less time on data entry and investigation.
- Coursera: They are using Azure OpenAl Service with GPT-4 to create a new Alpowered learning experience on their platform.
- Coca-Cola: They are using Azure OpenAl to build a knowledge hub and plan to leverage GPT-4's multimodal capabilities for marketing, advertising, public relations, and customer relations.
- Other companies of all sizes are using Azure Al to improve customer experiences, summarize long-form content, help write software, and reduce risk by predicting the right tax data.