Summarizing

In this lesson, you will summarize text with a focus on specific topics.

Setup

```
In [1]:  import openai
         import os

         from dotenv import load_dotenv, find_dotenv
         _ = load_dotenv(find_dotenv()) # read local .env file

         openai.api_key  = os.getenv('OPENAI_API_KEY')
```

```
In [2]:  def get_completion(prompt, model="gpt-3.5-turbo"): # Andrew mentioned that t
             messages = [{"role": "user", "content": prompt}]
             response = openai.ChatCompletion.create(
                 model=model,
                 messages=messages,
                 temperature=0, # this is the degree of randomness of the model's out
             )
             return response.choices[0].message["content"]
```

Text to summarize

```
In [3]:  prod_review = """
         Got this panda plush toy for my daughter's birthday, \
         who loves it and takes it everywhere. It's soft and \
         super cute, and its face has a friendly look. It's \
         a bit small for what I paid though. I think there \
         might be other options that are bigger for the \
         same price. It arrived a day earlier than expected, \
         so I got to play with it myself before I gave it \
         to her.
         """
```

Summarize with a word/sentence/character limit

In [4]:
```python
prompt = f"""
Your task is to generate a short summary of a product \
review from an ecommerce site.

Summarize the review below, delimited by triple
backticks, in at most 30 words.

Review: ```{prod_review}```
"""

response = get_completion(prompt)
print(response)
```

This panda plush toy is loved by the reviewer's daughter, but they feel it is
a bit small for the price.

Summarize with a focus on shipping and delivery

In [5]:
```python
prompt = f"""
Your task is to generate a short summary of a product \
review from an ecommerce site to give feedback to the \
Shipping deparmtment.

Summarize the review below, delimited by triple
backticks, in at most 30 words, and focusing on any aspects \
that mention shipping and delivery of the product.

Review: ```{prod_review}```
"""

response = get_completion(prompt)
print(response)
```

The customer is happy with the product but suggests offering larger options f
or the same price. They were pleasantly surprised by the early delivery.

Summarize with a focus on price and value

```python
In [6]: prompt = f"""
        Your task is to generate a short summary of a product \
        review from an ecommerce site to give feedback to the \
        pricing deparmtment, responsible for determining the \
        price of the product.

        Summarize the review below, delimited by triple
        backticks, in at most 30 words, and focusing on any aspects \
        that are relevant to the price and perceived value.

        Review: ```{prod_review}```
        """

        response = get_completion(prompt)
        print(response)
```

The customer loves the panda plush toy for its softness and cuteness, but fee
ls it is overpriced compared to other options available.

Comment

- Summaries include topics that are not related to the topic of focus.

Try "extract" instead of "summarize"

```python
In [7]: prompt = f"""
        Your task is to extract relevant information from \
        a product review from an ecommerce site to give \
        feedback to the Shipping department.

        From the review below, delimited by triple quotes \
        extract the information relevant to shipping and \
        delivery. Limit to 30 words.

        Review: ```{prod_review}```
        """

        response = get_completion(prompt)
        print(response)
```

The shipping department should take note that the product arrived a day earli
er than expected.

Summarize multiple product reviews

In [8]:

```python
review_1 = prod_review

# review for a standing lamp
review_2 = """
Needed a nice lamp for my bedroom, and this one \
had additional storage and not too high of a price \
point. Got it fast - arrived in 2 days. The string \
to the lamp broke during the transit and the company \
happily sent over a new one. Came within a few days \
as well. It was easy to put together. Then I had a \
missing part, so I contacted their support and they \
very quickly got me the missing piece! Seems to me \
to be a great company that cares about their customers \
and products.
"""

# review for an electric toothbrush
review_3 = """
My dental hygienist recommended an electric toothbrush, \
which is why I got this. The battery life seems to be \
pretty impressive so far. After initial charging and \
leaving the charger plugged in for the first week to \
condition the battery, I've unplugged the charger and \
been using it for twice daily brushing for the last \
3 weeks all on the same charge. But the toothbrush head \
is too small. I've seen baby toothbrushes bigger than \
this one. I wish the head was bigger with different \
length bristles to get between teeth better because \
this one doesn't.  Overall if you can get this one \
around the $50 mark, it's a good deal. The manufactuer's \
replacements heads are pretty expensive, but you can \
get generic ones that're more reasonably priced. This \
toothbrush makes me feel like I've been to the dentist \
every day. My teeth feel sparkly clean!
"""

# review for a blender
review_4 = """
So, they still had the 17 piece system on seasonal \
sale for around $49 in the month of November, about \
half off, but for some reason (call it price gouging) \
around the second week of December the prices all went \
up to about anywhere from between $70-$89 for the same \
system. And the 11 piece system went up around $10 or \
so in price also from the earlier sale price of $29. \
So it looks okay, but if you look at the base, the part \
where the blade locks into place doesn't look as good \
as in previous editions from a few years ago, but I \
plan to be very gentle with it (example, I crush \
very hard items like beans, ice, rice, etc. in the \
blender first then pulverize them in the serving size \
I want in the blender then switch to the whipping \
blade for a finer flour, and use the cross cutting blade \
first when making smoothies, then use the flat blade \
if I need them finer/less pulpy). Special tip when making \
smoothies, finely cut and freeze the fruits and \
```

```
        vegetables (if using spinach-lightly stew soften the \
        spinach then freeze until ready for use-and if making \
        sorbet, use a small to medium sized food processor) \
        that you plan to use that way you can avoid adding so \
        much ice if at all-when making your smoothie. \
        After about a year, the motor was making a funny noise. \
        I called customer service but the warranty expired \
        already, so I had to buy another one. FYI: The overall \
        quality has gone done in these types of products, so \
        they are kind of counting on brand recognition and \
        consumer loyalty to maintain sales. Got it in about \
        two days.
        """

        reviews = [review_1, review_2, review_3, review_4]
```

```
In [9]:  for i in range(len(reviews)):
             prompt = f"""
             Your task is to generate a short summary of a product \
             review from an ecommerce site.

             Summarize the review below, delimited by triple \
             backticks in at most 20 words.

             Review: ```{reviews[i]}```
             """

             response = get_completion(prompt)
             print(i, response, "\n")
```

0 Soft and cute panda plush toy loved by daughter, but a bit small for the pr
ice. Arrived early.

1 Great lamp with storage, fast delivery, excellent customer service, and eas
y assembly. Highly recommended.

2 The reviewer recommends the electric toothbrush for its impressive battery
life, but criticizes the small brush head.

3 The reviewer found the price increase after the sale disappointing and noti
ced a decrease in quality.

Try experimenting on your own!

```
In [ ]:
```