

Expanding

In this lesson, you will generate customer service emails that are tailored to each customer's review.

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

Customize the automated reply to a customer email

In [3]:

```
# given the sentiment from the lesson on "inferring",
# and the original customer message, customize the email
sentiment = "negative"

# review for a blender
review = f"""
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 down 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.
"""
```

In [4]:

```
prompt = f"""
You are a customer service AI assistant.
Your task is to send an email reply to a valued customer.
Given the customer email delimited by ``` , \
Generate a reply to thank the customer for their review.
If the sentiment is positive or neutral, thank them for \
their review.
If the sentiment is negative, apologize and suggest that \
they can reach out to customer service.
Make sure to use specific details from the review.
Write in a concise and professional tone.
Sign the email as `AI customer agent`.
Customer review: ```{review}```
Review sentiment: {sentiment}
"""

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

Dear Valued Customer,

Thank you for taking the time to leave a review about our product. We are sorry to hear that you experienced an issue with the motor after a year of use. We apologize for any inconvenience this may have caused you.

We would like to suggest that you reach out to our customer service team for further assistance with this issue. They will be happy to help you find a solution to the problem.

We appreciate your feedback about the pricing of our product. We strive to offer competitive prices and we apologize if you feel that the prices were raised unfairly. We will take your feedback into consideration as we continue to improve our products and services.

Thank you again for your review and for choosing our product. We hope to have the opportunity to serve you again in the future.

Best regards,

AI customer agent

Remind the model to use details from the customer's email

In [5]:

```
prompt = f"""
You are a customer service AI assistant.
Your task is to send an email reply to a valued customer.
Given the customer email delimited by ``` , \
Generate a reply to thank the customer for their review.
If the sentiment is positive or neutral, thank them for \
their review.
If the sentiment is negative, apologize and suggest that \
they can reach out to customer service.
Make sure to use specific details from the review.
Write in a concise and professional tone.
Sign the email as `AI customer agent`.
Customer review: ```{review}```
Review sentiment: {sentiment}
"""
response = get_completion(prompt, temperature=0.7)
print(response)
```

Dear Valued Customer,

Thank you for taking the time to provide your feedback on our product. We are sorry to hear that you had a negative experience with the pricing of the 17 piece system and the issue with the motor after the warranty expired.

We apologize for any inconvenience this may have caused you. If you have any further concerns or would like to discuss this matter further, please do not hesitate to reach out to our customer service team. They will be happy to assist you in any way they can.

Thank you again for your review and for choosing our product. We hope to have the opportunity to serve you better in the future.

Best regards,
AI customer agent

Try experimenting on your own!

In [7]:

```
#Temperature set to 0.7
prompt = f"""
You are a customer service AI assistant.
Your task is to send an email reply to a valued customer.
Given the customer email delimited by ``` , \
Generate a reply to thank the customer for their review.
If the sentiment is positive or neutral, thank them for \
their review.
If the sentiment is negative, apologize and suggest that \
they can reach out to customer service.
Make sure to use specific details from the review.
Write in a concise and professional tone.
Sign the email as `AI customer agent`.
Customer review: ```{review}```
Review sentiment: {sentiment}
"""

response = get_completion(prompt, temperature=0.7)
print(response)
```

Dear Valued Customer,

Thank you for taking the time to write a review about our product. We apologize for the inconvenience caused regarding the fluctuation in prices. We understand how frustrating it can be when a product you were interested in suddenly increases in price. We appreciate the feedback about the base, and we will take it into consideration for future improvements.

We're sorry to hear that you experienced an issue with your motor after a year of use. Although your warranty has expired, we are always here to help and would be happy to assist you with any future issues. Please do not hesitate to reach out to our customer service team if you need any further assistance.

Thank you for the helpful tips and suggestions about using our product. We appreciate your loyalty and hope that you continue to enjoy using our products.

Best regards,

AI customer agent

In [8]:

```
#Temperature set to 0.9
prompt = f"""
You are a customer service AI assistant.
Your task is to send an email reply to a valued customer.
Given the customer email delimited by ``` , \
Generate a reply to thank the customer for their review.
If the sentiment is positive or neutral, thank them for \
their review.
If the sentiment is negative, apologize and suggest that \
they can reach out to customer service.
Make sure to use specific details from the review.
Write in a concise and professional tone.
Sign the email as `AI customer agent`.
Customer review: ```{review}```
Review sentiment: {sentiment}
"""

response = get_completion(prompt, temperature=0.9)
print(response)
```

Dear valued customer,

Thank you for taking the time to leave a review of our 17 piece system. We are sorry to hear of the issue you experienced with our pricing, and we apologize for any inconvenience it may have caused. We take this matter seriously and will look into it to ensure it does not happen again.

Additionally, we are sorry to learn about the trouble with your machine after using it for a year. We understand your frustration and hope you can accept our sincere apologies for any disappointment caused. As our valued customer, we would like to invite you to contact our customer service team to discuss further and explore possible solutions to the problem.

Thank you again for your feedback, and we hope to earn back your trust in the future.

Best regards,

AI customer agent

In []: