

Model Integration

Step 1: Install the OpenAI library

Make sure you have installed the OpenAI library by running the following command in your terminal:

```
pip install openai
```

Step 2: Import the OpenAI library

Add the following line to the top of your Flask project file (**app.py**):

```
python  
  
from openai import OpenAI
```

Step 3: Set your OpenAI API key

Add the following line to set your OpenAI API key:

```
python  
  
OpenAI.api_key = "YOUR_OPENAI_API_KEY"
```

Replace **YOUR_OPENAI_API_KEY** with your actual OpenAI API key.

Step 4: Define the negotiation logic

Define the negotiation logic for price offers using the OpenAI model. You can use the **negotiate_price** function as an example:

```
Python  
  
def negotiate_price(user_offer):  
  
    # Use the OpenAI model to generate a response  
  
    response = OpenAI.Completion.create(
```

```

    engine="text-davinci-002",

    prompt=f"User offered ${user_offer}. Respond with a
counteroffer or acceptance.",

    max_tokens=1024,

    temperature=0.5,

)

# Extract the bot's response from the OpenAI model output

bot_response = response.choices[0].text

return bot_response

```

This function uses the OpenAI **text-davinci-002** engine to generate a response based on the user's offer.

Step 5: Update the `/negotiate` endpoint

Update the `/negotiate` endpoint to use the `negotiate_price` function:

```
python
```

```

@app.route('/negotiate', methods=['POST'])

def negotiate():

    # Get user input from the request (price offer)

    user_input = request.json['user_input']

    user_offer = int(user_input)

```

```
# Generate bot's response using the OpenAI model
```

```
bot_response = negotiate_price(user_offer)
```

```
return jsonify({"bot_response": bot_response})
```

Step 6: Test the integration

Restart your Flask development server by running **python app.py** again. Then, open a web browser and navigate to **http://127.0.0.1:5000** to test the negotiation chatbot interface.

When you enter a price offer and click the "Negotiate" button, the chatbot should respond with a message generated by the OpenAI model.