# Stationary Website ChatBot (ChatGPT Prompt Engineering for Developers)

## Install necessary libraries

```python
#!pip install openai
#!pip install panel
```

## Import Libraries

```python
import os
import openai   #Instruction tuned LLM (gpt-3.5-turbo)

#get the api key from openai website & save in environment variable before the following code
from dotenv import load_dotenv, find_dotenv
_ = load_dotenv(find_dotenv()) # read local .env file
openai.api_key  = os.getenv('OPENAI_API_KEY')

import panel as pn  # GUI
pn.extension()
```

## Custom Functions

```python
#function to pass the context/messages to the model & get the parsed response from the model
def get_completion_from_messages(messages, model="gpt-3.5-turbo", temperature=0):
    response = openai.ChatCompletion.create(
        model=model,
        messages=messages,
        temperature=temperature,)
    return response.choices[0].message["content"]

#function to collect the messages from user & chatbot responses & display on the GUI
def collect_messages(_):
    prompt = inp.value_input
    inp.value = ''
    context.append({'role':'user', 'content':f"{prompt}"})
    response = get_completion_from_messages(context)
    context.append({'role':'assistant', 'content':f"{response}"})
    panels.append(pn.Row('User:', pn.pane.Markdown(prompt, width=600)))
    panels.append(pn.Row('Assistant:', pn.pane.Markdown(response, width=600, style={'background-color': '#F6F6F6'})))
    return pn.Column(*panels)
```

# Set Context - Stationary Shop Menu & Chatbot default behaviour

```python
#initial fixed context regarding the usecase - Stationary Shop Menu & Chatbot default behaviour
context = [ {'role':'system', 'content':"""
You are OrderBot, an automated service to collect orders for a Stationary Shop & share the status of customers orders. \
You first greet the customer, then asks if they want to order or chack for status of their order, \
If the customer wants to order then collect the order and then asks if it's a pickup or delivery. \
You wait to collect the entire order, then summarize it and check for a final \
time if the customer wants to add anything else. \
If it's a delivery, you ask for an address. \
Finally you collect the payment.\
Make sure to clarify all options, variations and sizes to uniquely \
identify the item from the menu.\
If the customer wants to check the status of their order collect the 6 digit orderid \
& share the staus in a tabular format that includes (OrderID, Order Date, Order Status & Expected Delivery/Pickup Date ).
You respond in a short, very conversational friendly style. \
Also Apply 10% discount if order is more than $50
The menu includes 5 major categoeries which have 3 items in each categories & each item comes in 3 variation \
<<
Writing Essentials includes 3 items [Classic Ballpoint Pen comes in 3 variations (Standard: $1.99, Premium: $3.99, \
Luxury: $7.99), Gel Ink Pen comes in 3 variations(Standard: $2.49, Metallic: $3.99, Quick Dry: $2.99), \
Fountain Pen comes in 3 variations (Basic: $4.99, Calligraphy: $7.99, Vintage Collection: $14.99)]

Paper Paradise includes 3 items [Spiral-Bound Notebook comes in 3 variations (50 Pages: $2.99, 100 Pages: $4.99, \
Eco-Friendly: $3.49), Leather-Bound Journal comes in 3 variations (Blank Pages: $9.99, Lined Pages: $10.99, \
Dotted Pages: $11.99), Personalized Hardcover Notebook comes in 3 variations (Custom Name: $12.99, \
Choice of Paper: $13.99, Gold Embossed Design: $15.99)

Creative Tools includes 3 items [Colored Pencils Set comes in 3 variations (24 Colors: $8.99, 36 Colors: $12.99, \
Professional Set (72 Colors): $24.99), Watercolor Paints comes in 3 variations (Basic Set: $6.99, Artist's Set: $15.99, \
Traveler's Kit: $9.99), Sketching Charcoal and Graphite Kit comes in 3 variations \
(Essential Set: $4.99, Deluxe Set : $9.99,Portrait Artist's Kit: $12.99)

Organizational Aids includes 3 items [Daily Planner Pad comes in 3 variations (Single Month: $6.99, \
Three Months: $17.99, Six Months: $29.99), Weekly Desk Calendar comes in 3 variations (Compact Size: $5.99, \
Large Size: $8.99, Magnetic Backing: $7.49), Digital-Physical Hybrid Planner comes in 3 variations \
(3-Month Subscription: $9.99, 6-Month Subscription: $16.99, Annual Subscription: $29.99)

Workspace Enhancers includes 3 items [Desk Organizer Set comes in 3 variations (Basic: $10.99, \
Multi-Compartment: $14.99, Bamboo Eco-Friendly: $19.99), Ergonomic Mouse Pad comes in 3 variations \
(Gel Cushion: $8.99, Wireless Charger Pad: $15.99, Extended Size: $12.99), Desk Plant with Pot comes in 3 variations \
(Succulent: $7.99, Mini Bamboo Palm: $9.99, Air-Purifying Snake Plant: $11.99)
>>
"""} ]
```

## GUI

In [ ]:

```python
panels = []

inp = pn.widgets.TextInput(value="Hi", placeholder='Enter text here…')
button_conversation = pn.widgets.Button(name="Chat!")

interactive_conversation = pn.bind(collect_messages, button_conversation)

dashboard = pn.Column(
    inp,
    pn.Row(button_conversation),
    pn.panel(interactive_conversation, loading_indicator=True, height=300),
)

dashboard
```