

Assignment 2  
**CO3251 – NATURAL LANGUAGE  
PROCESSING**

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# **A complete user guide for supermarket chatbot**

## **1. Introduction**

Welcome to the user guide of the supermarket chatbot named “Shoppingbot”. This will provide instructions on how to install, run, and use the chatbot application. The chatbot assists customers by providing shelf numbers for items they are looking for in the supermarket. In the supermarket provided in this application has the following goods in its shelves.

### **List of items in the supermarket**

#### **Shelf 1 – Fruits**

- Apples
- Bananas
- Mangoes
- Pineapples
- Papaya

#### **Shelf 2 – Vegetables**

- Carrot
- Beans
- Cabbage
- Onions
- Garlic
- Tomatoes
- Brinjals
- Leeks
- Capsicum

#### **Shelf 3 – Meat**

- Chicken
- Fish
- Pork
- Sausages
- Mutton

#### **Shelf 4 – Cleaning items**

- Soap
- Detergent
- Washing powder
- Handwash
- Harpic
- Air freshener
- Tile Cleaner

#### Shelf 5 – Bakery items

- Bread
- Bun
- Hotdog

#### Shelf 6 – Frozen foods

- Butter
- Cheese
- Yoghurt
- Curd
- French fries

#### Shelf 7 – Beauty items

- Hair oil
- Shampoo
- Conditioner
- Face wash
- Day cream
- Night cream

#### Shelf 8 – Baby items

- Baby soap
- Baby oil
- Baby shampoo
- Diapers

#### Shelf 9 – Stationery

- Books
- Pens
- Pencils
- Glue

#### Shelf 10 – Snacks

- Peanuts
- Biscuits
- Cassava chips

#### Shelf 11 – Drinks

- Ginger beer
- Coca cola
- Soda
- Water
- Fanta
- Cream soda

## **2. System Requirements**

To use the supermarket chatbot application, ensure your system meets the following requirements,

- Operating System: Windows, macOS or Linux
- Python 3.6 or later
- Internet connection (for initial installation of packages)

## **3. Installation**

Follow these steps to install the necessary packages and set up the application,

1. Install Python
2. Install required packages

Open your terminal and run the following commands

```
pip install spacy
python -m spacy download en_core_web_sm
pip install reportlab
```

3. Download the chatbot code

Save the provided chatbot code as SuperMarketChatbot.py in a directory of your choice.

## **4. Running the Application**

To run the chatbot application follow the following steps,

1. Open your terminal window

2. Navigate to the directory where the code is saved.

Use the 'cd' command to navigate to the directory where SuperMarketChatbot.py is saved.

For example:

```
cd path/to/your/directory
```

3. Run the code

Execute the code by running the following command,

```
Python SuperMarketChatbot.py
```

## **5. Using the Chatbot**

Once the application is running, a GUI window will be appeared. Then following steps should be followed to interact with the chatbot.

1. Enter your message  
Type your message or query into the text entry box at the bottom of the window.
2. Send the message  
Click the 'Send' button to send your message to the chatbot.
3. View the response  
The chatbot's response will appear in the chat history area.

After interacting with the chatbot a PDF with the shelf numbers will be generated and saved as "Shelf Numbers.pdf"

## **6. Troubleshooting**

If you encounter issues while using the chatbot, try the following solutions.

1)

- Issue – 'spacy' or 'reportlab' not found
- Solution – Ensure you have installed the required packages correctly using the correct commands.

2)

Issue – Error when running the code

Solution – Ensure you are running the code from the correct directory and that Python is installed and added to your system's path.

3)

Issue – PDF not generating

Solution – Ensure you have write permissions in the directory where the code script is running. Try running the terminal as an administrator.

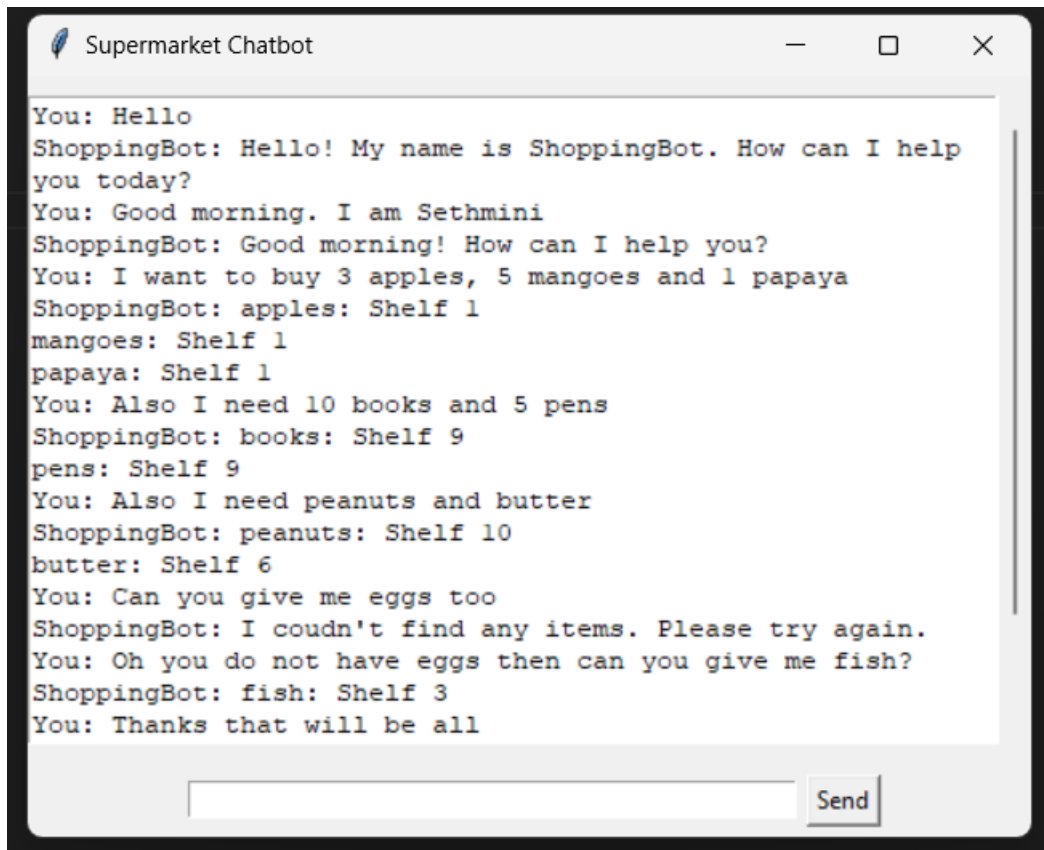


Figure 1: GUI window of the chatbot

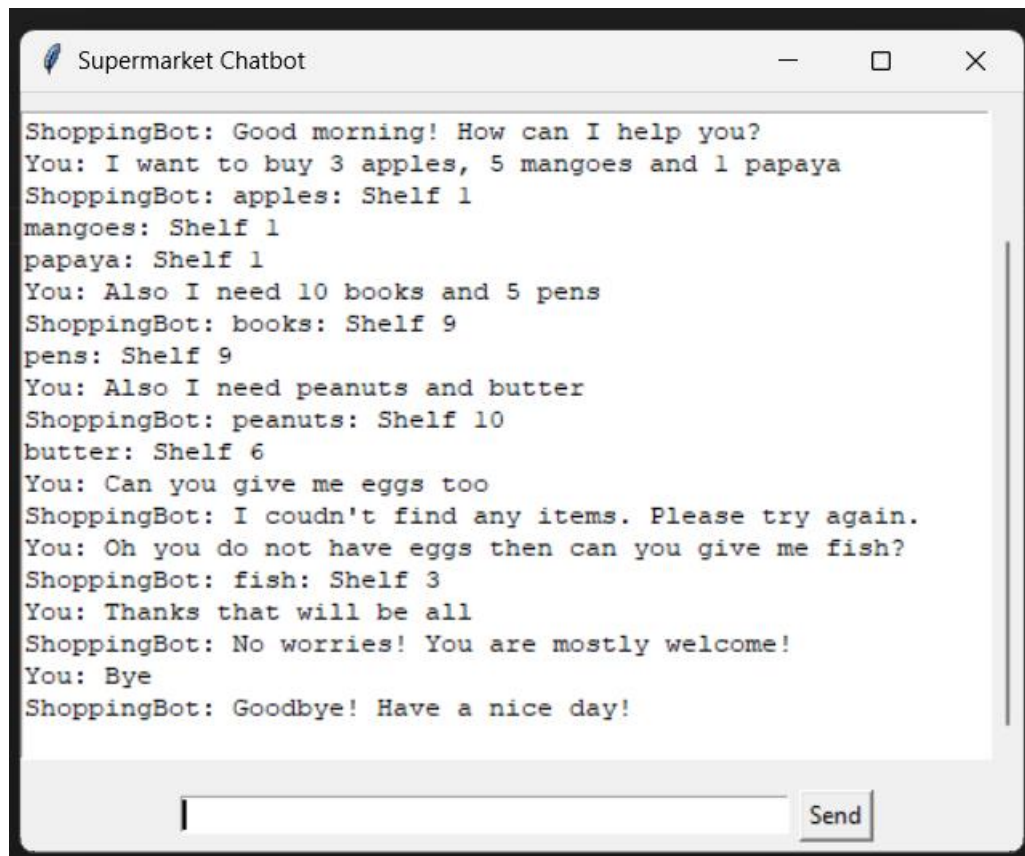


Figure 2: GUI window of the chatbot

## Supermarket Shelf Numbers

apples: Shelf 1  
mangoes: Shelf 1  
papaya: Shelf 1  
books: Shelf 9  
pens: Shelf 9  
peanuts: Shelf 10  
butter: Shelf 6  
fish: Shelf 3

Figure 3: Content of the Shelf Numbers.pdf for the above results