

Self Ordering Counter System

Import pandas for structured display of receipt

import pandas as pd

Initialize the order serial number and control variable for repeating orders

sr_no = 1

repeat = "yes"

print("Self Ordering Counter")

List to hold ordered item details

order_items = []

Start order loop

while (repeat == "yes"):

total_amount = 0

orderedQty = price = name = 0

```
# Collect customer details
```

```
customer_name = str(input("Enter your name :"))
```

```
phone_number = int(input("Enter your mobile number without country code :"))
```

```
gender = str(input("Gender : "))
```

```
# Greet customer based on gender
```

```
if (gender == "male" or gender == "Male"):
```

```
    print(f"Hello Mr. {customer_name} . \nWhat would you like to have for today?")
```

```
else:
```

```
    print(f"Hello Ms/Mrs. {customer_name} . \nWhat would you like to have for today?")
```

```
# Display menu
```

```
print("*" * 5, "Menu items", "*" * 5)
```

```
menu = [
```

```
    {"sr_no": 1, "name": "Whole Milk (1 Gallon)", "price": 3.49},
```

```
{ "sr_no": 2, "name": "White Bread (Loaf)", "price": 2.49},  
{ "sr_no": 3, "name": "Brown Eggs (Dozen)", "price": 3.29},  
{ "sr_no": 4, "name": "Chicken Breast (per lb)", "price": 5.29},  
{ "sr_no": 5, "name": "Fuji Apples (per lb)", "price": 1.49}
```

```
]
```

```
print("----- Restaurant Menu -----")
```

```
for item in menu:
```

```
    print(f"{item['sr_no']} {item['name']:25} ${item['price']:.2f}")
```

```
    sr_no += 1
```

```
# Get initial item order
```

```
srNoInput = int(input("Enter serial number of product you want to order:"))
```

```
discount = 0
```

```
# Check valid serial number
```

```
if (srNoInput > 5):
```

```
print("Please enter serial number from 1 to 5.")
```

```
srNoInput = int(input("Enter serial number of product you want to order:"))
```

```
if (srNoInput == 2):
```

```
    discount = 0.05
```

```
else:
```

```
    if (srNoInput == 2):
```

```
        discount = 0.05
```

```
# Process item order
```

```
orderedQty = int(input("Enter quantity to order:"))
```

```
arrayNum = srNoInput - 1
```

```
price = menu[arrayNum]['price']
```

```
name = menu[arrayNum]['name']
```

```
print(f"Ordered Item: {name}, Quantity: {orderedQty}, Price: ${price}, Discount: {discount*100}%")
```

```
total_amount = float(price) * orderedQty
```

```
print(f"Sub Total: ${total_amount}")
```

```
print(f"Discount {discount*100}%: ${float(total_amount * discount)}")
```

```
# Apply discount
```

```
total_amount = total_amount - round(float(total_amount * discount), 2)
```

```
new_total_amount = total_amount
```

```
# Append order to order list
```

```
order_items.append({
```

```
    "item_sr_no": menu[arrayNum]['sr_no'],
```

```
    "item_name": name,
```

```
    "sales_price": price,
```

```
    "ordered_qty": orderedQty,
```

```
    "discount %": discount * 100,
```

```
    "sub_total": f"${new_total_amount:.2f}"
```

```
})
```

```
# Ask for more orders

repeatInput = str(input("Would you like to order more? (yes/no):"))

while repeatInput == "yes":

    orderedQty = price = name = 0

    srNoInput = int(input("Enter serial number of product you want to order:"))

    if (srNoInput > 5):

        print("Please enter serial number from 1 to 5.")

        srNoInput = int(input("Enter serial number of product you want to order:"))

        if (srNoInput == 2):

            discount = 0.05

    else:

        if (srNoInput == 2):

            discount = 0.05

    orderedQty = int(input("Enter quantity to order:"))
```

```
arrayNum = srNoInput - 1
```

```
price = menu[arrayNum]['price']
```

```
name = menu[arrayNum]['name']
```

```
print(f"Ordered Item: {name}, Quantity: {orderedQty}, Price: ${price}, Discount: {discount*100}%")
```

```
total_amount += float(price) * orderedQty
```

```
print(f"Sub Total: ${float(price) * orderedQty}")
```

```
print(f"Discount {discount*100}%: ${float((price * orderedQty) * discount)}")
```

```
new_total_amount = total_amount - round(float(total_amount * discount), 2)
```

```
order_items.append({
```

```
    "item_sr_no": menu[arrayNum]['sr_no'],
```

```
    "item_name": name,
```

```
    "sales_price": price,
```

```
    "ordered_qty": orderedQty,
```

```
    "discount %": discount * 100,
```

```
"sub_total": f"${(price * orderedQty) - (price * orderedQty) * discount:.2f}"  
})
```

```
repeatInput = str(input("Would you like to order more? (yes/no):"))
```

```
# Print receipt if no more items to order
```

```
if (repeatInput == "no"):
```

```
    print(f"\n::: Receipt :::")
```

```
    df = pd.DataFrame(order_items)
```

```
    print(df.to_string(index=False))
```

```
    print(f"\nTotal amount = ${new_total_amount:.2f}")
```

```
    print("Please visit again. Thank you ☺ ")
```

```
# Ask for new order
```

```
repeat = input("New Order? (yes/no):")
```


if repeat != "yes":

break

Demonstration

Enter your name : John

Enter your mobile number without country code : 9876543210

Gender : Male

Enter serial number of product you want to order: 2

Enter quantity to order: 2

Would you like to order more? (yes/no): yes

Enter serial number of product you want to order: 1

Enter quantity to order: 1

Would you like to order more? (yes/no): no

New Order? (yes/no): no

Input / Output

Hello Mr. John.

What would you like to have for today?

***** Menu items *****

----- Restaurant Menu -----

1 Whole Milk (1 Gallon) \$3.49

2 White Bread (Loaf) \$2.49

3 Brown Eggs (Dozen) \$3.29

4 Chicken Breast (per lb) \$5.29

5 Fuji Apples (per lb) \$1.49

Ordered Item: White Bread (Loaf), Quantity: 2, Price: \$2.49, Discount: 5.0%

Sub Total: \$4.98

Discount 5.0%: \$0.249

Ordered Item: Whole Milk (1 Gallon), Quantity: 1, Price: \$3.49, Discount: 0%

Sub Total: \$3.49

Discount 0%: \$0.0

::: Receipt :::

item_sr_no	item_name	sales_price	ordered_qty	discount %	sub_total
2	White Bread (Loaf)	2.49	2	5.0	\$4.73
1	Whole Milk (1 Gallon)	3.49	1	0.0	\$3.49

Total amount = \$8.22

Please visit again. Thank you ☺