

Weekly Test – 08

Mini Project

Write a Python program for an **Online Shopping System** that has default available products from below categories Electronics, Cloths and Fruits. Here are few default products from the category are Laptop, Headphones, SamsungS22, Shirt, Pant, Apple, Banana, Papaya and there is a privilege to add some more products into system from the above categories.

This project is mainly about the shopping and admin related functionalities, user will shop some products based on need and he/she has to add the required products to cart and place an order and can also perform Add products to system for shopping, display available products for shopping, add products to cart, remove products from cart, clear cart, view cart, update quantity. At last, user can place an order and would be generating an invoice in the text format, for each product per quantity with 10% GST (0.1) with the total amount in the invoice. **Write python code using classes, Exceptions, Regular Expressions and Database.**

Note: Main focus on Database and database queries are added in the file named Queries.txt.

Detailed Explanation:

As soon as the module execute as shown in the below snap option should be visible to perform. Each and every option choose should communicate with database and perform.

```
-->> Welcome <<--

-->> Start the shopping <<--

1. Add Product into system
2. Display all Available Products
3. Add Product to cart
4. Remove Product from cart
5. View cart
6. Update item quantity
7. Clear cart
8. Place order
9. Exit

Enter your choice:
```

User has to enter the choice number **Ex. 1** (Add Product into System) then ask the category of the product. Based on the product category initiate the class, check the products or not if not exists then only add the new product into `products` table in database.

```
-----> Choose the Product Category <-----
1. Electronics
2. Clothing
3. Food

Enter product Category Choice:
```

```

-----> Choose the Product Category <-----
1. Electronics
2. Clothing
3. Food

Enter product Category Choice: 2
Enter product Name: Jogger
Enter product Price: 1500
Enter product Description: Stylish branded jogger good look
Enter product Size(cm, ex:42): 36
Data inserted into cart successfully.

Press Any Key To Continue..

```

As soon as enter the required details that particular product has to add products table in database along with default existing products.

1. If option is 2 (Display all available Products), then display all available products from products table from database.

```

Enter your choice: 2

--> All available Products to add to cart <--
Product Id: 1
Product Name: Laptop
Product Price: 40000
Product Warranty: 12
Product Description: Very good speed laptop for office purpose

Product Id: 2
Product Name: Shirt
Product Price: 800
Product Warranty: 42
Product Description: Branded shirt looks very professional

Product Id: 3
Product Name: Pant
Product Price: 1200
Product Warranty: 36
Product Description: Branded pant goes selection for office work

```

2. If option is 3 (Add Product to cart), then ask the product name which is available in products table from database. Check if product exists or not with product name, if not exists then add the product to cart table in database.

```

--> Start the shopping <--

1. Add Product into system
2. Display all Available Products
3. Add Product to cart
4. Remove Product from cart
5. View cart
6. Update item quantity
7. Clear cart
8. Place order
9. Exit

Enter your choice: 3
Enter product Name to add: Laptop
Enter the product quantity: 4
Product inserted into cart successfully.

Press Any Key To Continue..

```

3. If option is 4 (Remove Product from cart), then ask the product name which is available in cart table from database. Check if product exists or not with product name in cart table if exists then remove from cart table.

```

--> Start the shopping <--

1. Add Product into system
2. Display all Available Products
3. Add Product to cart
4. Remove Product from cart
5. View cart
6. Update item quantity
7. Clear cart
8. Place order
9. Exit

Enter your choice: 4
Enter product Name to remove: Laptop
Product: Laptop Removed from cart successfully.

Press Any key To Continue..

```

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4. If option is 5 (View cart) , display all the products which are available in cart table from database.

```

-->> Start the shopping <--
1. Add Product into system
2. Display all Available Products
3. Add Product to cart
4. Remove Product from cart
5. View cart
6. Update item quantity
7. Clear cart
8. Place order
9. Exit

Enter your choice: 5          -->> Display Products From Cart <--
Data exists:
Product Id: 2
Product Name: Shirt
Product price: 8000
Product Quantity: 4
Product Warranty: 42

Product Id: 3
Product Name: Pant
Product price: 12000
Product Quantity: 4
Product Warranty: 36

Press Any key To continue..

```

5. If option is 6 (Update item quantity), then ask the product name and quantity to update the cart. Check the Product exists or not, if exists update the new quantity for a particular product.

```
--> Start the shopping <--
1. Add Product into system
2. Display all Available Products
3. Add Product to cart
4. Remove Product from cart
5. View cart
6. Update item quantity
7. Clear cart
8. Place order
9. Exit
Enter your choice: 6
Enter Product Name to update quantity: Shirt
Enter the new quantity: 2
Product Exists Updating quantity!
Updated Cart Records
Press Any Key To Continue..
```

6. If option is 7 (Clear cart), clear the `cart` table and make ready for the new entries to add products to `cart` for shopping. As we are clearing (Erasing) the data ask for one more confirmation `yes/no`.

```

-->> Start the shopping <--
1. Add Product into system
2. Display all Available Products
3. Add Product to cart
4. Remove Product from cart
5. View cart
6. Update item quantity
7. Clear cart
8. Place order
9. Exit
Enter your choice: 7
Are you sure, you want to clear your cart? (Yes/No) yes
Cart has cleared successfully!

Press Any key To Continue..

```

7. If option is 8 (Place Order), then please take some of the inputs validate as per below. a. The program should ask to user to enter the `customer_name` and `phone_number` to add in invoice.

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- b. Validate customer name and phone number. Customer name should contain only

- upper, lower alphabets and spaces. `phone_number` should contain only 10 digits number and 0 or 91 are the optional numbers at starting of the phone number.
- c. Post successful validation of `customer_name` and `phone_number`, the program should ask to user for invoice `file_name` so that the invoice will be generated with user given file name.
 - d. As soon as user entered file name, the order will be placed and generate the invoice and clear the cart.
 - e. For tracking purpose please update the orders in database in the table `products_order` with unique id for each invoice generated products and add the `order_id` in the invoice aswell.
 - f. Once the order placed and the invoice generated do `clear cart` it should be ready for the new products for shopping.

Invoice Details:

Customer Name: User name accepted as input

Phone Number: Customer Phone Number

Date: Default Date when the order placed

Order Id: Generated Order id the same should be available in `products_order` table in database.

```
-->> Start the shopping <-->

1. Add Product into system
2. Display all Available Products
3. Add Product to cart
4. Remove Product from cart
5. View cart
6. Update item quantity
7. Clear cart
8. Place order
9. Exit

Enter your choice: 8
Please Enter the your Name: chandu
Enter the Phone Number: 7013866531
Enter the filename for the invoice (e.g., invoice): my_invoice
Order has been placed, Invoice generated and saved to my_invoice.txt
```

NOTE: The sample invoice is attached in the weekly test with the name is **invoice.txt**.

- 8. If user wants to exit then choice number should be 7 then the program should come out from the execution.

Note: The requirement explanation available in the below link

----->>> <https://youtu.be/kxvsqpirqcA?si=FiLKfkgLxI7Pp5bg> <<<-----