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.

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.

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.

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.

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.

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

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.

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`.

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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Batch-64 Python fullstack training program
Youtube Channel: **python.trainer.helper**

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.

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.