

Shopping_App

October 15, 2024

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[ ]: # Dictionary to save credentials of users
users = {
    "user1": {
        "usertype": "user",
        "password": "1234567",
        "cart": []
    },
    "user2": {
        "usertype": "user",
        "password": "1234567",
        "cart": []
    },
    "admin": {
        "usertype": "admin",
        "password": "1234567"
    }
}

# Dictionary of category
category={"1": "Footwear", "2": "Clothing", "3": "Electronics"}

# Dictionary of product
product1={"id": "1", "name": "sports shoes", "catId": "1", "price": "1800"}
product2={"id": "2", "name": "sneakers", "catId": "1", "price": "800"}
product3={"id": "3", "name": "t-shirt", "catId": "2", "price": "1000"}
product4={"id": "4", "name": "smartphones", "catId": "3", "price": "40000"}
products=[product1, product2, product3, product4]

name=""

# Function to view all category
def viewCat():
    print("\nCategory are as follows:")
    for index, item in category.items():
        print(index, ". ", item)

# Function to view product of selected category
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def catlog():
    choice = input("\nSelect the categories from following \n 1. Footweares \n
↪2. Clothing \n 3. Electronic \n Enter your choice: ")
    if(int(choice) < 4):
        print("\n Product from "+ category[str(choice)]+" are: \n\n")
        for index, item in enumerate(products):
            if(products[index]["catId"]== choice):
                print("-----")
                print("Product Id: "+(products[index]["id"]))
                print("Product Name: "+(products[index]["name"]))
                print("Product Price: "+(products[index]["price"]))
                print("-----")
            else:
                print("Invalid choice")

    userMenu()

# Function to view all product
def viewProduct():
    for index, item in enumerate(products):
        print("\n\n-----")
        print("Product Id: "+(products[index]["id"]))
        print("Product Name: "+(products[index]["name"]))
        print("Product Price: "+(products[index]["price"]))
        print("-----")

# Function to view all items in cart of logged in user
def viewCart():
    item=len(users[name]["cart"])
    if(item == 0):
        print("\n You have 0 item in cart \n")
    else:
        print("\n You have "+ str(item) +" items in cart \n")
        for i in users[name]["cart"]:
            print("Category "+category[i["catId"]]+" | Product Name
↪"+i["name"]+" Product Price "+i["price"])
        userMenu()

# Function to add item to cart
def addToCart():
    pId = input("Enter the product id: ")
    quantity= input("Enter the quantity: ")
    item=None
    for i in products:
        if(i["id"]==pId):
            item=i
            print("Item to be added is"+ str(item))

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        break
j=int(quantity)
while j!=0:
    users[name]["cart"].append(item)
    j = j-1
print("The item added successfully")
addMore=input("\n Do you want to add more product? (Y/N): ")
if(addMore == "Y"):
    addToCart()
else:
    userMenu()

# Function to remove item/items from cart
def removeItem():
    if(len(users[name]['cart'])!=0):
        pId = input("Enter the product id: ")
        quantity= input("Enter the quantity: ")
        for i in products:
            if(i['id']==pId):
                print("Item to be removed is"+ str(i))
                break
        j=int(quantity)
        for user in users.values():
            if 'cart' in user:
                for cart in user['cart']:
                    while j!=0:
                        user['cart'].remove(cart)
                        j=j-1
                print(users)
                print("The item removed successfully")
        else:
            print("Your cart is empty")
        userMenu()

# Function to calculate price of all the items and checkout by selection
↳particular mode of payment
def checkout():
    if(len(users[name]['cart'])!=0):
        item = users[name]["cart"]
        total = 0
        for i in item:
            total=total+int(i["price"])
        paymentMode=input("Please select payment mode from following: \n 1. UPI \n
↳2. PayPal \n 3. Netbanking \n 4. Debit Card \n 5. Credit Card \n Enter
↳choice: ")
        # Display a checkout message that is specific to the selected payment
↳option.

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        print("You will be shortly redirected to make a payment of Rs.", total)
        # Display a success message.
        print("Your payment has been successfully processed.")
    else:
        print("Your cart is empty")
    userMenu()

# Function to logout from account (user/admin)
def logout():
    global name
    name = ""
    print("\nyou have been logged out successfully")
    print("Visit us again soon!\n")
    return None

# Function to select option from user menu
def userMenu():

    choice = input("\n\n Select from following option \n 1. Catlog \n 2. View_
↳Cart \n 3. Add item to cart \n 4. Remove item from cart \n 5. Checkout \n 6._
↳Logout \n Enter your choice: ")
    if(choice == "1"):
        catlog()
    elif(choice == "2"):
        viewCart()
    elif(choice == "3"):
        addToCart()
    elif(choice == "4"):
        removeItem()
    elif(choice == "5"):
        checkout()
    elif(choice == "6"):
        logout()
    else:
        print("Invalid choice")

# Function for user login
def userLogin():
    username = input("Enter username: ")
    password = input("Enter password: ")
    global name
    name =username

    if(users.get(username) is not None):
        if(users[username]["password"]==password):
            if(users[username]["usertype"]=="user"):
                print("\n\nWelcome "+ username.upper()+"!!!\n\n")

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        userMenu()
    else:
        print("\nInvalid credentials\n")
        return username
    else:
        print("\nInvalid credentials\n")
        return None

# Function to signup
def signUp():
    username=input("Enter username: ")
    password=input("Enter password: ")
    retype=input("Enter confirm password: ")
    global name
    name =username
    if(password == retype):
        print("\n\nWelcome to Shopping App\n\n")
        users.update(
            { username:{
                "usertype": "user",
                "password": password,
                "cart": []}
            }
        )
        userMenu()
        return username
    else:
        print("Password and Confirm Password does not match")
        return None

# Function for adding category
def addCategory():
    print()
    id = input("\n Enter category id: ")
    name= input("Enter Category name: ")
    category.update({id:name})
    viewCat()
    adminMenu()

# Function for removing category
def removeCategory():
    id = input("\n Enter category id: ")
    for i in products:
        if(i["id"] == id):
            products.remove(i)
    del category[id]
    viewCat()

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adminMenu()

# Function for adding product to particular category
def addProduct():
    print()
    id = input("\n Enter product id: ")
    name= input("Enter product name: ")
    catId = input("\n Enter product category id: ")
    price= input("Enter product price: ")
    # Create a new product dictionary.
    new_product = {
        "name": name,
        "id": id,
        "price": price,
        "catID": catId,
    }
    # Add the new product to the list of products.
    products.append(new_product)
    print("The product has been added successfully!")
    viewProduct()
    adminMenu()

# Function to update product
def updateProduct():
    print()
    id = input("\n Enter product id: ")
    name= input("Enter product name: ")
    catId = input("\n Enter category id: ")
    price= input("Enter product price: ")
    for index, item in enumerate(products):
        if(products[index]["id"]== id):
            print("Update", item, "from products")
            products[index]["name"] = str(name)
            products[index]["catId"] = str(catId)
            products[index]["price"] = str(price)
    viewProduct()
    adminMenu()

# Function to remove product
def removeProduct():
    print()
    id = input("\n Enter product id: ")
    for i in products:
        if(i["id"] == id):
            print("Removed", i, "from products", id)
            products.remove(i)
    viewProduct()

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adminMenu()

# Function to select option from admin menu
def adminMenu():
    choice = input("\n\n Select from following option \n 1. Add Category \n 2. ↵
    ↪ Remove Category \n 3. Add Product \n 4. Update Product \n 5. Remove Product ↵
    ↪ \n 6. Logout \n Enter your choice: ")
    if(choice == "1"):
        addCategory()
    elif(choice == "2"):
        removeCategory()
    elif(choice == "3"):
        addProduct()
    elif(choice == "4"):
        updateProduct()
    elif(choice == "5"):
        removeProduct()
    elif(choice == "6"):
        logout()
    else:
        print("Invalid choice")

# Function for admin login
def adminLogin():
    username = input("Enter username: ")
    password = input("Enter password: ")
    global name
    name =username
    if(users.get(username) is not None):
        if(users[username]["password"]==password):
            if(users[username]["usertype"]=="admin"):
                print("\n\nWelcome "+ username.upper()+"!!!\n\n")
                adminMenu()
            else:
                print("\nInvalid credentials\n")
        return username
    else:
        print("\nInvalid credentials\n")
        return None

# Start point of complete application
def start():
    print("\n\nWelcome to the Demo Shopping Marketplace\n\n")
    loginType=input("Enter the type of login \n 1. User Login \n 2. Signup \n 3.
    ↪ Admin Login \n Enter your choice: ")
    if(int(loginType) == 1):
        userLogin()

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elif (int(loginType)== 2):  
    signUp()  
elif (int(loginType)== 3):  
    adminLogin()  
else:  
    print("Invalid choice")  
start()
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