

Technical Document for Shopping App in Python

Overview

This document outlines the structure and functionality of a shopping application developed in Python. The application allows users and administrators to perform various tasks related to shopping, including user registration, product management, and order processing.

Features

1. Start

- **Function:** `start()`
- **Description:** Entry point of the application.
- **Options:**
 - Sign Up (`signUp()`)
 - User Login (`userLogin()`)
 - Admin Login (`adminLogin()`)

```
For more details, please visit https://support.apple.com/kb/HT200050.
Apples-MacBook-Pro:~ foram$ /usr/local/bin/python3 /Users/foram/Documents/Python/Shopping/shopping.py

Welcome to the Demo Marketplace

Enter the type of login
1. User Login
2. Signup
3. Admin Login
Enter your choice: 1
Enter username: user1
Enter password: 1234567

Welcome USER1!!!
```

2. Signup

- **Function:** `signUp()`
- **Description:** Allows new users to create an account.
- **Inputs:** Username, password.
- **Storage:** User credentials are stored in a dictionary.

3. User Login

- **Function:** `userLogin()`
- **Description:** Authenticates user credentials.
- **Inputs:** Username and password.
- **Flow:**
 - Validates credentials against the users dictionary.
 - On success, redirects to user menu (`userMenu()`).

```
Welcome to the Demo Marketplace
```

```
Enter the type of login
```

1. User Login
2. Signup
3. Admin Login

```
Enter your choice: 1
```

```
Enter username: user1
```

```
Enter password: 1234567
```

```
Welcome USER1!!!
```

```
Select from following option
```

1. Catlog
2. View Cart
3. Add item to cart
4. Remove item from cart
5. Checkout
6. Logout

```
Enter your choice: █
```

4. User Menu

- **Function:** `userMenu()`
- **Description:** Displays options for logged-in users.

- **Options:**
 1. View Catalog (`viewCatalog()`)
 2. View Cart (`viewCart()`)
 3. Add Item to Cart (`addToCart()`)
 4. Remove Item from Cart (`removeFromCart()`)
 5. Checkout (`checkout()`)
 6. Logout (`logout()`)

5. Admin Login

- **Function:** `adminLogin()`
- **Description:** Authenticates admin credentials.
- **Inputs:** Admin username and password.
- **Flow:**
 - Validates credentials against the users dictionary.
 - On success, redirects to admin menu (`adminMenu()`).

6. Admin Menu

- **Function:** `adminMenu()`
- **Description:** Displays options for logged-in administrators.
- **Options:**
 1. Add Category (`addCategory()`)
 2. Remove Category (`removeCategory()`)
 3. Add Product (`addProduct()`)
 4. Remove Product (`removeProduct()`)
 5. Update Product (`updateProduct()`)
 6. Logout (`logout()`)

7. Add Category

- **Function:** `addCategory()`
- **Description:** Allows admin to add a new product category.
- **Inputs:** Category ID, category name.

Welcome to the Demo Marketplace

Enter the type of login

1. User Login
2. Signup
3. Admin Login

Enter your choice: 3

Enter username: admin

Enter password: 1234567

Welcome ADMIN!!!

Select from following option

1. Add Category
2. Remove Category
3. Add Product
4. Update Product
5. Remove Product
6. Logout

Enter your choice: 1

Enter category id: 4

Enter Category name: Food

Category are as follows:

- 1 . Footwear
- 2 . Clothing
- 3 . Electronics
- 4 . Food

8. View Category

- **Function:** `viewCat()`
- **Description:** Displays all categories in the application.

9. Remove Category

- **Function:** `removeCategory()`
- **Description:** Allows admin to remove a category and all associated products.

10. Add Product

- **Function:** `addProduct()`
- **Description:** Allows admin to add a new product to a category.
- **Inputs:** Product ID, product name, product price, category ID

```
Select from following option
1. Add Category
2. Remove Category
3. Add Product
4. Update Product
5. Remove Product
6. Logout
Enter your choice: 3

Enter product id: 5
Enter product name: Maggi

Enter product category id: 4
Enter product price: 100
The product has been added successfully!

-----
Product Id: 1
Product Name: boot
Product Price: 800

-----
Product Id: 2
Product Name: sandal
Product Price: 300

-----
Product Id: 3
Product Name: tunic
Product Price: 1000

-----
Product Id: 4
Product Name: mobile
Product Price: 40000

-----
Product Id: 5
Product Name: Maggi
Product Price: 100
-----
```

11. View Product

- **Function:** `viewProduct()`
- **Description:** Displays all products within a specific category.

12. Remove Product

- **Function:** `removeProduct()`
- **Description:** Allows admin to remove a specific product from the application.

```
Select from following option
1. Add Category
2. Remove Category
3. Add Product
4. Update Product
5. Remove Product
6. Logout
Enter your choice: 5

Enter product id: 2
Removed {'id': '2', 'name': 'sandal', 'catId': '1', 'price': '300'} from products 2

-----
Product Id: 1
Product Name: boot
Product Price: 800

-----
Product Id: 3
Product Name: tunic
Product Price: 1000

-----
Product Id: 4
Product Name: mobile
Product Price: 40000

-----
Product Id: 5
Product Name: Momo
Product Price: 80
-----
```

13. Update Product

- **Function:** `updateProduct()`
- **Description:** Allows admin to update product details.

```

Select from following option
1. Add Category
2. Remove Category
3. Add Product
4. Update Product
5. Remove Product
6. Logout
Enter your choice: 4

Enter product id: 5
Enter product name: Momo

Enter category id: 4
Enter product price: 80
Update {'name': 'Maggi', 'id': '5', 'price': '100', 'catID':

-----
Product Id: 1
Product Name: boot
Product Price: 800

-----
Product Id: 2
Product Name: sandal
Product Price: 300

-----
Product Id: 3
Product Name: tunic
Product Price: 1000

-----
Product Id: 4
Product Name: mobile
Product Price: 40000

-----
Product Id: 5
Product Name: Momo
Product Price: 80
-----

```

14. Add Item to Cart

- **Function:** `addToCart()`
- **Description:** Allows users to add items to their shopping cart.
- **Inputs:** Category, product ID, quantity, price.

15. Remove Item from Cart

- **Function:** `removeFromCart()`
- **Description:** Allows users to remove items from their cart.
- **Inputs:** Product ID, quantity.

Select from following option

1. Catlog
2. View Cart
3. Add item to cart
4. Remove item from cart
5. Checkout
6. Logout

Enter your choice: 3

Enter the product id: 1

Enter the quantity: 1

Item to be added is{'id': '1', 'name': 'boot', 'catId': '1', 'price': '800'}

The item added successfully

Do you want to add more product? (Y/N): Y

Enter the product id: 2

Enter the quantity: 1

Item to be added is{'id': '2', 'name': 'sandal', 'catId': '1', 'price': '300'}

The item added successfully

Do you want to add more product? (Y/N): N

Select from following option

1. Catlog
2. View Cart
3. Add item to cart
4. Remove item from cart
5. Checkout
6. Logout

Enter your choice: 2

You have 2 items in cart

Category Footwear		Product Name boot	Product Price 800
-------------------	--	-------------------	-------------------

Category Footwear		Product Name sandal	Product Price 300
-------------------	--	---------------------	-------------------

```

Select from following option
1. Catlog
2. View Cart
3. Add item to cart
4. Remove item from cart
5. Checkout
6. Logout
Enter your choice: 4
Enter the product id: 1
Enter the quantity: 1
Item to be removed is{'id': '1', 'name': 'boot', 'catId': '1', 'price': '800'}
{'user1': {'usertype': 'user', 'password': '1234567', 'cart': [{'id': '2', 'name': 'sandal', 'catId': '1', 'price': '300'}]}, 'user
2': {'usertype': 'user', 'password': '1234567', 'cart': []}, 'admin': {'usertype': 'admin', 'password': '1234567'}}
{'user1': {'usertype': 'user', 'password': '1234567', 'cart': [{'id': '2', 'name': 'sandal', 'catId': '1', 'price': '300'}]}, 'user
2': {'usertype': 'user', 'password': '1234567', 'cart': []}, 'admin': {'usertype': 'admin', 'password': '1234567'}}
The item removed successfully

Select from following option
1. Catlog
2. View Cart
3. Add item to cart
4. Remove item from cart
5. Checkout
6. Logout
Enter your choice: 2

You have 1 items in cart

Category Footwear | Product Name sandal Product Price 300

```

16. Checkout

- **Function:** `checkout()`
- **Description:** Facilitates the checkout process for users.
- **Inputs:** Payment mode.
- **Outputs:** Total amount to be paid.

```

Select from following option
1. Catlog
2. View Cart
3. Add item to cart
4. Remove item from cart
5. Checkout
6. Logout
Enter your choice: 5
Please select payment mode from following:
1. UPI
2. PayPal
3. Netbanking
4. Debit Card
5. Credit Card
Enter choice: 1
You will be shortly redirected to make a payment of Rs. 300
Your payment has been successfully processed.

```

17. Logout

- **Function:** `logout()`
- **Description:** Logs the user out of the application.

```
Select from following option
```

- ```
1. Catlog
2. View Cart
3. Add item to cart
4. Remove item from cart
5. Checkout
6. Logout
```

```
Enter your choice: 6
```

```
you have been logged out successfully
Visit us again soon!
```