CSC Project AY 2023-2024

Introduction

The "Online Shopping Program" is a simple Python program designed to simulate an online shopping experience. It provides users with a menu-driven interface to browse and purchase items from different categories, view their cart, and complete the checkout process.

Purpose

The primary purpose of this program is to demonstrate fundamental Python programming concepts, including:

- 1. Functions: The code is organized into functions, making it modular and easy to understand. Each function handles a specific part of the program, such as displaying the menu, processing user input, and simulating various shopping categories.
- 2. Conditional Statements: The program uses conditional statements (if-elif-else) to determine the user's choice and take appropriate actions based on that choice. For example, when the user selects a category, the program directs them to the corresponding category function.
- 3. Loops: The code employs loops (while and for loops) to repeatedly perform tasks, such as displaying lists of items or validating user input. Loops are crucial for creating interactive and repetitive behavior in the program.
- 4. Data Structures: Dictionaries are used to store and manage the user's shopping cart. This demonstrates the usage of data structures to organize and store data efficiently.
- 5. Input and Output: The program uses the `input()` function to receive user input and `print()` to display information and messages to the user. This showcases how Python interacts with users.

- 6. Error Handling: Basic error handling is implemented to handle invalid user input. If a user enters an invalid choice, the program provides feedback and allows the user to try again.
- 7. String Manipulation: The program manipulates strings to display formatted information, such as product details and menu options.

Program Flow

Here's a brief overview of how the program flows:

- 1. Welcome Screen: When the program starts, it displays a welcome screen with a brief introduction to the online shop.
- 2. Main Menu: The user is presented with a menu containing several options, including "Welcome," "Our Mission," "Categories," "View Cart," "Check-out," and "Exit."
- 3. User Choices: Depending on the user's choice, the program directs them to different functions. For example, selecting "Categories" allows the user to browse and purchase items from various categories like groceries, cooking essentials, and tech products.
- 4. Shopping Categories: Within each category, the user can view a list of items, select the quantity they wish to purchase, and add products to their cart.
- 5. View Cart: The user can view the items in their cart along with the quantity, unit price, and total price of each item.
- 6. Checkout: In the checkout process, the program calculates the total cost of items in the cart and prompts the user for payment details and shipping address. A simulated delivery time is also provided.
 - 7. Exit: The user can choose to exit the program when they are done shopping.

Conclusion

This program is created for Chettinad Vidyashram's Computer Science Project. This Project is created by

A.D. Suriya

Adarsh Koshy

