

Object Oriented Programming -- Shopping Cart

Introduction:

In this project, you will use Python to write an object-oriented program that simulates a shopping cart of a DVD store.

Requirements:

- The program needs to be object oriented and written in Python.
- When program starts, a list of commands is displayed in shell for customer to choose from: “List” “Cart”, “Add”, “Remove”, “Checkout”.
- If the customer chooses “List”, a list of products as well as price are displayed. A file called products.csv is provided. The program loads the product list from the file.
- If “Add” is selected, prompts will ask for which product and quantity to add to the cart.
- If “Cart” is selected, items in the shopping cart together with the price and quantity will be displayed.
- If “Remove” is selected, prompts will ask for which item in the shopping cart to remove.
- If “Checkout” is selected, calculate the shopping cart and display subtotal, tax (7%), and total.
- Your program should be able to handle user errors.
- Each student can do the project in a team of 4 students or less.
- You can research on the internet. But do not copy code directly from webpages.

Deliverables:

1. Project Report – You need to write a report that:
 - Has UML diagram of the class design
 - Show sample outputs from the program (screenshots)
 - Explain what knowledge you learned from the class are used in your project
 - If this is a team work, only one report is needed for the team. The report needs to clarify each team member’s contribution to the project.
2. Presentation – At the end of the semester, you will bring your project code to the classroom and present it to the class. In the presentation, you will explain and demo how the program works, and what are the techniques you implemented to provide the functionalities your project has.
3. Code – At the end of the semester, Zip all the code and report into one zip file and submit on blackboard. In the same folder, add an instruction file to provide simple instructions on how to run the program as well as short descriptions of the folders/files in the project.

Key Dates

12/4 12:30pm In Class Presentation

12/4 11:59pm Code and Project Report due