# Module Eight: Portfolio Project

## Online Shopping Cart

### Pseudocode

1. Start
2. Define Shopping Cart Class
   1. Create attributes for customer name, current date, and a list to store items.
   2. Define a method to add an item to the list.
      1. Ask for name, description, price and quantity.
      2. Add it to the cart
   3. Define a method to remove an item by matching its name.
      1. If the item is not found, display a message saying nothing was removed.
   4. Define a method to modify an existing item’s details.
      1. If the item is not found, display a message saying nothing was modified.
      2. Update if applicable
   5. Define a method to return the total number of items.
   6. Define a method to calculate and return the total cost of all items.
   7. Define a method to display all items with their quantity, cost per item, and total cost.
      1. If no items are in the cart, display the shopping cart is empty message.
   8. Define a method to display the description of each item.
3. Define an Item class
   1. Create attributes for name, price, quantity, and description.
   2. Define a method to calculate the cost of the item (quantity × price).
   3. Define a method to display the description of the item.
4. Define input validation methods to get a valid customer name, date, item name, description, price, and quantity.
5. Define main menu function.
   1. Loop until the user chooses to quit.
   2. Display menu options:
      1. Add item
      2. Remove item
      3. Change item quantity
      4. Output item description
      5. Output shopping cart
      6. Quit
6. Define main
   1. Ask the user for customer details
   2. Display customer details
   3. Create a shopping cart object
   4. Call the main menu function
   5. Use error handling to catch unexpected errors.

### Source Code

A screenshot of a computer program

AI-generated content may be incorrect.Main Function to prompt customer details and call menu function with a try-catch exception error handling implementation

A screenshot of a computer program

AI-generated content may be incorrect.Menu function logic

A screenshot of a computer program

AI-generated content may be incorrect.Shopping Cart Class and its functions to add, remove, and modify items

A screen shot of a computer code

AI-generated content may be incorrect.Shopping Cart class functions continued…

A computer screen shot of a code

AI-generated content may be incorrect.Item Class and its functions

A screenshot of a computer program

AI-generated content may be incorrect.Input Validation functions

A screenshot of a computer program

AI-generated content may be incorrect.Input Validation functions continued….

### OutputA screenshot of a computer AI-generated content may be incorrect. Output window prompting user for customer details with input validation; display main menu

and add item function with input validation

### A screenshot of a computer program AI-generated content may be incorrect. Display Item description and shopping cart

### A screenshot of a computer AI-generated content may be incorrect. Remove Item from cart and change item quantity function displaying error message A screenshot of a computer AI-generated content may be incorrect.Display the updated item descriptions and shopping cart; and lastly quit app

## Git Repository The source code and files for this assignment are also available on GitHub: [Bishal-Shah310/CSC-500: This is for School purpose only.](https://github.com/Bishal-Shah310/CSC-500)

Below is a screenshot of the repository:

A screenshot of a computer

AI-generated content may be incorrect.