

## Project- OOP / Inheritance

### Instructions

1. Write a comment at the top that contains the following information

```
// Your Name  
// Comment  
//
```

2. Properly indent, format and comment your code as necessary

**Warning: - No late submission is accepted!**

### Shopping Cart

**The Following is just base start. You have to change it as you wish:**

Implement a program that tracks customers' purchases. Create the following classes. Use appropriate access modifiers (instance variables should be private!) and data types for each. Do not forget to add getter and setter functions.

- **Item:** This class has the attributes (member variables) called title, description, and price.
  - **Book:** This class inherits from Item. It has an instance variable called pageCount.
  - **Movie:** This class inherits from Item. It has an instance variable called length.
  - **CD:** This class inherits from Item. It has an instance variable called trackCount.
- **ShoppingCart:** This class keeps track of items that were bought. You may limit the number of items in the cart. The cart should have functions to add an item and print the items currently in the cart to the console.
- **Customer:** The customer class stores an id, the first name and the last name and a pointer to a shopping cart object.

Very important hint:

Object oriented programming problem solving is very simple if you think of real things, we do every day. This project given as base to see how do you expand it (you will get credit on that). Let say you go to Target

buy things. Target has Shopping Cart, Items, Customers, Cashiers, you pick up Shopping Cart and add item or remove an item. Item knows its price and where was its location. Shopping Cart knows total amount of items.

Make sure each class has method of toString() also always have member That uniquely identifies that object.

Use comments to list your suggestion to improve this project.