

Assignment #1: Implement a Java program

Manage a Video Store Inventory

CS 3354.251 and 252 Spring 2017

Instructor: Jill Seaman

Due: Wednesday, 2/1/2017 (upload electronic copy by 10:30am)

Problem:

Write a Java program that will allow a user to manage the inventory of a store that sells DVDs.

The inventory for the video store will contain the following information for each movie (each title) in the inventory:

SKU (stock-keeping unit, an integer, must be unique)
title (may contain spaces in it)
price (dollars and cents, greater than 0)
quantity (number of copies in inventory, greater than or equal to 0)

The program should offer the user a menu with the following options:

1. Add a movie to the inventory (prompt user for input values in this order: sku, title, price, quantity).
2. Remove a movie from the inventory (by sku).
3. Display the information for a movie (given the sku).
4. Display the inventory in a table (in any order).
5. Quit

The program should perform the operation selected by number and then re-display the menu. If the operation fails (i.e. invalid input or attempt to remove a movie not in the inventory) your program should display an error message and return to the menu.

Do not change the menu numbers associated with the operations.

Your program should store the inventory in a file between executions of the program, so that when the program is run again it will start up with the same inventory contents as when it last terminated (use serialization!). Your program must run even if the file is not present (initial inventory will be empty).

NOTES:

- You may use an IDE (Eclipse, netbeans, etc) or just an editor and command line operations (javac, java) in unix or windows/dos to develop your program.
- This assignment may be done with a partner (in groups of 2).
- Try to use good design (don't put everything in one class, attributes should be private, try NOT to use getters and setters). I recommend using three classes. I recommend storing the inventory in an ArrayList.
- Use a package for your classes and put your files in the appropriate directory structure.
- Prices should be output in standard money format: (\$7.95).
- Be sure to validate the input (abort the operation with an error message if the data is invalid, then return to menu).
- Follow the style guidelines from the class website. **Use javadoc comments for all of your classes and methods.**

Logistics:

Please submit your files in a single zip file (assign1_XXXXXX_YYYYYY.zip). The XXXXXX and YYYYYY are your TX State NetIDs (mine is js236. You may have two, one for each partner. If you are working solo, you will only have one).

Submit: an electronic copy only, using the Assignments tool on the TRACS website for this class. If you are working in a pair, submit using the TRACS account of just ONE member of your partnership.