

SYSC 2004 Object-Oriented Software Development

Assignment #2

Download file `auction.zip` from the projects folder on the course Web site and extract all the files into a folder called "auction". Also download file "AuctionSkeleton.java".

This assignment is loosely based on exercises 4.48 to 4.52 in Chapter 4 of the text book. Note, however, that there is more to the assignment than in the exercises. The "AuctionSkeleton.java" file contains comments as to exactly what you need to do. Some of the code from the original "Auction.java" class has been removed from "AuctionSkeleton.java" as you need to rewrite it. However, looking at the original code in "Auction.java" will be useful.

Add "AuctionSkeleton.java" to your project. Then rename the original "Auction.java" file to "oldAuction.java", so that you can refer to it as needed. Now you can rename "AuctionSkeleton.java" to "Auction.java". Note that in Java the convention is to have the file name the same as the name of the class. I called your starting point "AuctionSkeleton.java" just so you wouldn't have two files with the same name!

The main changes you need to make are as follows:

- An auction can be open or closed. Certain methods may be performed only when the auction is in an open state (e.g. add an item, bid on an item, etc.). When an auction is closed only methods that don't change any fields should be invoked.
- While lots are given a number when they are created, and originally start out stored in the auction list in numeric order, this numeric order may not be preserved as lots can be removed. Thus there could be 4 lots in our auction, numbered 1, 4, 5, and 8 (i.e. it is **not** the case that the "i"th item in our list will necessarily be lot item "i+1").
- A new auction can be created from a closed auction, and it will start out containing all the items that didn't sell in the closed auction.

Submit file "Auction.java" from the *auction* project using the SYSC 2004 Assignment submit program for Assignment #2. Late submissions will **not** be accepted by the submit program or the instructor!
