

CS265 Project 4 Fall 2014

Total Points: 20

65%: correctness; 25%: design; 10%: documentation and style
(See Lab Standards on web page. Follow directions for submission of projects.)

Purpose: The objectives for this lab are to explore the functions of a queue, and to gain experience with exactly following specs for a module.

Problem Statement and Assignment:

Design an inventory class that stores the following members

serialNum: an integer that holds a part's serial number

manufactDate: a member that holds the date the part was manufactured

lotNum: an integer that holds the part's lot number

The class should have appropriate member functions (interfaces) for storing data into, and retrieving data from, these members.

Then, design a program that uses the queue class. The type of the queue should be the above inventory. The program should have a loop that asks the user whether he or she wishes to add a part to inventory or take a part from inventory. The loop should repeat until the user is finished.

If the user wishes to add a part to inventory, the program should ask for the serial number, date of manufacture, and lot number. The information should be stored in an inventory object using inventory interfaces and added into the inventory queue.

If the user wishes to take a part from inventory, the program should remove the front part from the queue and display the contents of its member variables.

When the user finishes, the program should display the contents of the member values of all the objects that remain in the queue.

Submission: Zip all source files and upload the zip file to the class drop box before due day.