CSCE 156 – Assignment 5 Rubric

Fall2018

Date: _____

Name(s): _____ Total: _____/100

CSE Login: _____ Grader: _____

Submission Type (Normal/Late): _____

What needs to be turned in:

- Your design document (hardcopy) one week prior to this assignment being due
- This rubric with Name(s) and CSE Login(s) filled in (via *webhandin*).
- Your runnable JAR file named (`InvoiceReport.jar`) and zip file (`InvoiceReport.zip`) containing your source code using *webhandin*

Grading will be based on the following items.

1. Programming Style

Items	Grader Notes	Points	Score
• Meaningful variable names • Proper Indentation • Consistency		2.5	
• Comments provided in the code to specify the functionality or the objective of the particular block of code		2.5	
Subtotal		**5**	

2. Program Correctness

Items	Grader Notes	Points	Score
• Correct file names • Correct class names • Source code is available in JAR • Other resources included in JAR as necessary		5	
• Jar runs on cse as specified through webgrader		2.5	
• Database is setup and available with the required data as specified		2.5	

• Output is readable, well-formatted and sorted as required (invoice total highest-to-lowest).		10	
• Each test case properly executes on *webgrader* as specified		30	
Subtotal		**50**	

3. Program Design

Items	**Grader Notes**	**Points**	**Score**
Proper objected oriented design • Each class is properly loaded • Each static method properly persists data to the database • Proper checks are made on inserts to ensure data integrity and avoid duplicates • ADT is properly abstracted and awareness of its state is not required for proper use • ADT design supports code reuse		25	
• All classes properly handle data integrity during deletes • Data is validated in some manner • Database connections and other related resources are managed appropriately • Integrity and exceptions are handled in a proper manner		10	

• The ADT provides means to add, remove and retrieve elements • Order is maintained rather than resorted • Capacity is not fixed and the ADT dynamically resizes		10	
Subtotal		**45**	

4. Bonus Items

__Bonus: Database errors are logged using log4j (or equivalent library) rather than silenced or to the standard output		(5)	
__Bonus: The ADT is generic and parameterized so that it may hold any type.		(5)	
__Bonus: The ADT implements the Iterable interface		(5)	
Subtotal		**0**	

Bonus Items

There are a couple of opportunities for bonus points. If you attempt any of the bonus point items and want them to be considered, check the items in the table above. Bonus points will be awarded for the following items.

1. In an actual system, it is bad practice to output errors and other "system" information to the standard output. Instead, it is usual to use some sort of logging system where the output can be *configured* to output to system log files or silenced entirely. For Java, the most popular logging system is log4j. Using this or an equivalent system is worth 5 bonus points.
2. If you make the ADT generic by parameterizing it so that it could be used to hold any type, it is worth bonus.
3. If your ADT implements the `Iterable` interface so that it may be used in an enhanced for-loop, it is worth bonus.