Homework 06

1 General Instructions

Homework should be submitted to Desire2Learn, as either a plain-text file or a PDF file. For parts of homework that are writing code you may wish to type your answers into an Eclipse projects so that you can test them, then copy and paste them into the document you are submitting.

Homework will be graded for <u>completion</u> – whether or not it looks like you have tried to answer all of the questions to the best of your ability – rather than <u>correctness</u>. I will be posting a solution after the due date. You are strongly encouraged to compare that solution to your own work, and ask questions if you do not understand any parts of the solution.

The purpose of homework is to help you figure out how well you understand the concepts that you can expect to see on the exams.

2 Assignment

1. What is the difference between a <u>stack</u> and a <u>queue</u>?

2. For each of the following operations on a list, give the worst-case time complexity in big-O notation.

	Insert At		Remove From		Get At
Implementation	Begin	End	Begin	End	Index
Array					
Linked List head					
Linked List w/ head + tail					

3. If you needed to implement both a stack and a queue using the same underlying list representation, which of the above options would you choose? Why?

3 Submitting Your Work

If your document is not already plain-text or PDF, convert it to one of those formats. Then upload it to D2L under this assignment.