HOME ▶ MY COURSES ▶ COMPUTER SCIENCE ▶ PREVIOUS SEMESTER ▶ CS2420-S13 ▶ LINKED LISTS ▶ ASSIGNMENT 6

Read the analysis document before begining this assignment.

The purpose of this assignment is to practice implementing and analyzing linked lists.

The assignment must be completed in pairs.

1. The Problem
   We have been asked to construct a list representation that can accommodate any type of item. We decide to implement a doubly linked list and compare its performance to Java's `ArrayList` to determine which is more efficient.

2. Requirements

   1. Create a class `MyLinkedList<E>` that implements a doubly-linked list according to this `List` interface. **Do not modify the file name, package name, or signatures of any methods.** Implement every method in the interface according to the functionality described in the comments. Your list should use 0-based indexing just like an array (the first item is considered at index 0). *Also, notice the required Big-O behavior for each method when implemented for a doubly-linked list.*Adhere to the following rules.

      - Add your `MyLinkedList` class to the `assignment6` package.
      - Include a zero-parameter constructor, `public MyLinkedList()`.
      - Do not use Java's `LinkedList` class.

   2. Create and submit tests for the `MyLinkedList` class. Consider carefully how to test for a broad range of inputs.

3. When preliminary coding is complete and your program compiles without error or warning, test the program thoroughly and systematically.

   Your code should be well-commented (Javadoc comments are recommended) and formatted such that it is clear and easy to read. Be sure to put the names of both programming partners in the header comment of each file.

   Zip your source code files (no `.class files`) and **upload the zip file here by 5p on February 21**. Please submit just one solution per pair.

NAVIGATION

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CS_2100_S_13

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Participants

General

Getting started; Java review

Generic programming; Object Oriented Programming

Algorithm analysis; Data Structures

Basic Sorting Algorithms

Recursive Sorting Algorithms

Linked Lists

Lab 4

Exam 1

4. Analysis Document (must be written and submitted by each programming partner) ***due February 21 at 5p***

Due date:	Thursday, 21 February 2013, 7:00 PM

Submission feedback

Paymon Saebi
Monday, 18 March 2013, 8:56 AM

Grade: 88.00 / 100.00

- Please see the attached files for grading details and analysis feedback.

- Apologies for the delay in posting your grade for this assignment!

Barsketis.pdf
Barsketis.txt

Submission

Assignment6Analysis.pdf
Assignment6Final.zip

No further submissions are allowed.

Slides
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Assignment 6 files
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Trees
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Spring Break!
Hash Tables
Binary Heaps
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Comprehensive Project; Multithreading
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SETTINGS

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