

Assignment 05 – Due: Friday, Feb 13th.

### Programming Project 4.5

Read through programming project 4.5 starting on page 225. Implement & document the class **DoubleLinkedSeq** as described in the text. You'll need to design & implement your own tester to verify that **DoubleLinkedSeq** works properly. The test program should exercises all the methods of your class at least one time.

Notes:

You can use **DoubleArraySequence** as a template for starting **DoubleLinkedSeq**. That being said, some methods you used in **DoubleArraySequence** (such as `ensureCapacity`) are not required for a linked list implementation.

You may use the class **DoubleNode** from the author's web site, however, make sure you understand the mechanics of the class. You may also wish to write some simple tester to check its methods for correctness. The code is at:

<http://www.cs.colorado.edu/~main/edu/colorado/nodes/DoubleNode.java>

Put a copy of your source code files & into a **.zip** file named **CS320-A05-YOURNAME.zip**. Note: if you have trouble creating zip files in the labs, refer to my tutorial on my Fall 2008 CS104 course page.

Upload the **.zip** file to Moodle.

The following rubric will be used for grading:

Description	Points
Correct filename(s) are used	1
Source code content – DoubleLinkedSeq class implemented as indicated in text/ documentation	15
Source code content – tester class exercises all the methods of DoubleLinkedSeq	3
Source code compiles without errors	2
Program executes	2
Program output is correct	5
Tester class, method(s) & parameters are documented	2
<b>TOTAL POSSIBLE POINTS:</b>	<b>30</b>
Extra credit: make modified version of <b>DoubleNode</b> called <b>DoubleTwoWayNode</b> which is doubly linked. Make sure to document the new class	3