

## Programming Project 4

*Note: When you turn in an assignment to be graded in this class you are making the claim that you neither gave nor received assistance on the work you turned in (except, of course, assistance from the instructor).*

For this program, you will use the BRIDGES DLElement class, instead of the Node class to implement a doubly-linked list. This class is to be named `BridgesDoublyLinkedList<E>`. and you it must implement the provided `MyListInterface.java` class. Test your implementation thoroughly and include a main method that produces the output described below.

*Output.* Use the BRIDGES visualizer to display the contents of the linked list after adding 20 Strings and exercising all of the methods in the interface within a main method of your `BridgesDoublyLinkedList` class.

Write the program in Java and compile it in JDK 8 or better. Follow all commenting conventions discussed in class and include a comment block at the top of your class file, `BridgesDoublyLinkedList.java`, with your name, semester, the course number and section.

You will upload the project source code file, `BridgesLinkedList.java` to the **Gradescope** and the URL for your visualization to the link in Blackboard.

### Programming Project 3 – Grading Rubric

#### **BridgesDoublyLinkedList** class:

<b>Constructor</b> is implemented correctly (5 pts.)	_____
<b>add(E)</b> method is implemented correctly (5 pts.)	_____
<b>add(int, E)</b> method is implemented correctly (5 pts.)	_____
<b>remove(int)</b> method is implemented correctly (5 pts.)	_____
<b>remove(E)</b> method is implemented correctly (5 pts.)	_____
<b>clear()</b> method is implemented correctly (5 pts.)	_____
<b>contains(E)</b> method is implemented correctly (5 pts.)	_____
<b>getEntry(int)</b> method is implemented correctly (5 pts.)	_____
<b>getFirst()</b> method is implemented correctly (5 pts.)	_____
<b>getLast()</b> method is implemented correctly (5 pts.)	_____
<b>getLength()</b> method is implemented correctly (5 pts.)	_____
<b>getNodeAt(int)</b> method is implemented correctly (5 pts.)	_____
<b>indexOf(E)</b> method is implemented correctly (5 pts.)	_____
<b>isEmpty()</b> method is implemented correctly (5 pts.)	_____
<b>lastIndexOf(E)</b> method is implemented correctly (5 pts.)	_____
<b>toArray()</b> method is implemented correctly (5 pts.)	_____
<b>toString()</b> method is implemented correctly (5 pts.)	_____
Files are named and submitted as specified (5 pts.)	_____
Appropriate use of comments (including header comment) (5 pts.)	_____
Correctly connects to BRIDGES for visualization (5 pts)	_____

Total (100 pts.) \_\_\_\_\_

**5 POINT BONUS:** Complete an online survey about the project at this link:

[https://unccpsych.az1.qualtrics.com/jfe/form/SV\\_dcK4tmEmIQ68hDv](https://unccpsych.az1.qualtrics.com/jfe/form/SV_dcK4tmEmIQ68hDv)

In order to get credit for the bonus, you must enter your V# in the survey. They don't know your name, so the only way I can know to give you the extra credit is if you correctly enter your V#. Be sure to use VXXXXXXXX, where you replace each X with the value in your V#.