Jonathan Barton

Mitchell Orsucci

CSE 373 Project 1

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1. **Handling Null and non-Null entries**

In DoubleLinkedList.java, for the ‘get()’ and ‘indexOf()’ methods, we may receive an input that is null or not. Because we are comparing against objects in the DoubleLinkedList, we first started by using the ‘equals()’ method contained in the Object class. However, when using this method on a null object, Java throws a Null Pointer Exception. Thus, to adequately check against any null items in the double linked list, we can use the equals operator: ‘==’. So, to fully implement this in Double Linked List, we first check whether the item we’re looking for in the DoubleLinkedList is null or not. If it is null, we use ‘==’ to compare it against items already in the list. However, if the item is not null, we use the ‘equals()’ method to check against other items in the list.

// Jon, write about handling NULL in ArrayDictionary here.

1. **Experiment Data**
2. **Experiment 1**
   1. Test 1 tests the efficiency of the remove() method when removing from the front of the list. Test 2 tests the efficiency of the remove() method when removing from the back of the list. Both of these tests begin with a test on an ArrayDictionary of size 0 and increase the size of the ArrayDictionary by 100 each test until the maximum ArrayDictionary size is reached.
   2. // JON can you look at these test and try to forecast something about removing from an array based on its size?
   3. JON CAN YOU ANALYZE THESE RESULTS?