

CS150 Lab 13 Notes

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Introduction

The container class utilized is WordCount(). WordCount is initialized through a String corresponding to the word. It also holds a count corresponding to the number of times the word came up. Getters and Setters are included. The TreeMultiSet class holds the mentioned lab guide methods using a TreeMap. For adding and removing, both the count and word was edited depending on the situation. TreeMap stored the key values as the String words and the value values as the Integer count. WordFreqs uses the convertPriorityQueue method to get the PriorityQueue. The PriorityQueue is poll() for the top ten elements (the ten can be changed) and placed in LinkedList. ExperimentController runs it all together. WordCountComparator is necessary for sorting the PriorityQueue.

Unit Tests

WordCountTest tests each of the getters and setters. TreeMultiSet was tested for each of the remove methods, add method, empty, toArray, convertPQueue, count. WordCountComparator was tested for the compare method. The rest of the classes could not be unit tested by design.

Required Output

```
Word is: "defects," Count is: 1
Word is:      Count is: 1
Word is: 'twould Count is: 1
Word is: 'twixt Count is: 1
Word is: 'twill Count is: 1
Word is: 'twere-i Count is: 1
Word is: 'twere Count is: 1
Word is: 'tween Count is: 1
Word is: 'twas Count is: 1
Word is: 'tis, Count is: 1
```

Trouble Report

The program will not run. There is a sorting problem with the PriorityQueue

References

Scanner(Java Platform SE 7). (2020, June 24). Retrieved November 15, 2020, from <https://docs.oracle.com/javase/7/docs/api/java/io/Scanner.html>

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(2020, July 09). Retrieved November 24, 2020, from
<https://docs.oracle.com/javase/8/docs/api/java/util/TreeMap.html>