**CS 1632-Deliverable 4**

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<https://github.com/dms163/CS1632-Deliverable4.git>

Summary

For deliverable 4 I chose to do property based testing to test the arrays.sort() method. This deliverable wasn’t very challenging aside from thinking of what to test. I wanted to test originally if the sort would return an array with the same type but I realized that would be much more difficult. So I chose to test three aspects. The first was to test the size of the arrays was the same by making a copy of the array and then comparing the sizes after the sort method was called. The second thing I decided to test was the sorting method’s ability to produce identical sorts. So I created a copy of the array to be sorted and then compared each element within the arrays to see if the element was identical. If it wasn’t the test would fail otherwise it would assert true. Finally I tested the sort’s ability to return the same elements. This would look for the elements within the now sorted array and check to see if it existed in the non-sorted copy. Ultimately the challenge of this deliverable was the Junit tests, because for some reason they refused to work.

Screenshot:

