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CS 1632 - DELIVERABLE 4

PROPERTY-BASED TESTING

https://github.com/RobertsonDavid/cs1632-deliverable4/tree/master

I chose to do the JUnit property based testing. I chose this project because I was interested in using JUnit to create tests for someone else’s code. Also, I find writing these tests interesting, so I wanted to make sure I could get more practice.

I started this project by creating a method to create a randomized array. This method creates an array with random length and containing random ints. This is then used throughout the testing, and looped for the desired number of tested arrays. I tested for the size of the array to stay the same, tested for the sorted array to always be increasing or staying the same, tested that the values in the sorted array are never decreasing, and tested for idempotentcy and purity. I just used simple assertions and my arrayGenerator method to create the tests. When necessary, I used an array copy to test the before and after of the sorted arrays.

I didn’t really encounter any problems during this project, but I did learn a little more about JUnit. I learned the specifics of how my IDE DrJava works with testing. This made creating and running my tests a lot simpler. I also learned a bit more about the differences between assertEquals and assertArrayEquals.

