

Hurricane Project – Array Basic Statistics and Sorts

Early Peer Review

Name _____

Total ____/25

Date _____ Period _____

Assessor _____ Date signed off as being completely correct _____

Hurricane Class

✓

- _____ Comments include name, date, and summary using Javadoc and uses correct grammar.
- _____ Instance variables – declared to be private and variable names are spelled out
- _____ Constructor with correct parameters and it calls `determineCategory`
- _____ `getName`, `getPressure`, `getSpeed`, `getYear`, `getMonth`, `getCategory`
- _____ `determineCategory`
- _____ `toString` – uses `String.format` method
- _____ `compareYearTo`, `compareNameTo`, `comparePressureTo`, `compareSpeedTo`, `compareCategoryTo` (each are one-line methods)
- _____ CheckStyle finds no errors. Javadoc is correctly done for all methods and constructors. These include:
 - Summary
 - @param, if appropriate
 - @return, if appropriate

HurricaneOrganizer Class with an Array of Hurricane Objects

- _____ Comments include name, date, and summary using Javadoc and uses correct grammar.
- _____ Instance variables – array of hurricane objects
- _____ `findMaxPressure` without sorting first
- _____ `findMaxWindspeed` without sorting first
- _____ `findMinPressure` without sorting first
- _____ `findMinWindSpeed` without sorting first
- _____ `calculateAveragePressure`
- _____ `calculateAverageWindSpeed`
- _____ `calculateAverageCategory`
- _____ `sortYears` – selection sort that sorts the years ascending and uses `compareYearTo`
- _____ `sortNames` – insertion sort that sorts the names ascending and uses `compareNameTo`
- _____ `sortCategories` – selection sort that sorts the categories descending and uses `compareCategoryTo`
- _____ CheckStyle finds no errors in the methods listed above. Javadoc is correctly done for all methods and constructors. These include:
 - Summary is clear, concise and useful to a client of the class.
 - @param, if appropriate (if the parameter is an index, the comment states if index is included or excluded)
 - @return, if appropriate

Hurricane Testing

Test	
Test the sorts in the following order:	
• Sort names (ascending)	
• Sort categories (descending)	
• Sort years (ascending)	
Test averages:	
• Wind 90.86	
• Pressure 961.76	
• Category 2.012 (this varies a bit)	
Test minimums and maximums:	
• Speed min 65 max 150	
• Pressure min 882 max 1002	