**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, although compareNameTo can be multiple lines to make it case insensitive.)

\_\_\_\_\_ 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 mentioned above. Javadoc is correctly done for constructors (*plus*

*associated methods that read the hurricanedata.txt file*) and the methods mentioned above. 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 2.12 |  |
| Test minimums and maximums: |  |
| * Speed min 64 max 150 |  |
| * Pressure min 882\_max 1002 |  |