CS 222a HFrancis

## Object-Oriented Programming II Project Assignment Sheet: H 12.2 – Implementing an Interface

University of Pikeville Fall 2020

## Assignment:

First, look at Exercise 12.61. It asks you to study the Comparable interface (which you need to do) and design a class to implement it (which you don't need to do). The weblog-analyzer project from Chapter 7 is attached to the assignment link. A sample solution to this exercise is provided in the attached BlueJ project coffee.

Devise a way to order the items in your collection. It could be alphabetically by description, by age, by value, whatever makes most sense for those items.

Modify your class (superclass if you completed H 10.1) to implement either the Comparator interface or the Comparable interface. If you use the Comparator, you'll need to change the collection type to some kind of set. Write a compare/compareTo method which can be used to properly order your items in the manner you chose. If you changed to a Set, the compareTo method is used automatically when you add an item to the collection. If you kept a List, you'll need to call sort on your collection each time you add something to it to keep it in order; sort will use the compare method in whatever object you provide as a parameter.

Set/Comparable/compareTo – no duplicates, ordered as added List/Comparable/compare – duplicates allowed, use a call to sort to order.

## Requirements for an M:

- implements the correct class
- proper method is written
- method in the collection class is written to add objects to the collection and demonstrate that the collection is ordered.

## Related Learning Outcomes:

H 12.2: Implement a Java interface type J 12.4: Implement an interface

Due Date/Time:

As posted on Canvas