

COSC 1047 (SF16) - Introduction to Computer Science

Assignment #3

Due: June 09th, 2016

NOTE: You must include commenting in all of these assignments at the top. Marks will be deducted for inadequate documentation.

Part A: This question is to be submitted to the instructor in the form of a Word (or Open Office) document containing the Java code and appropriate screen capture(s) of the output. The file name must be in the form **ASSIGN4A_YourName** where 'YourName' is your last name followed by your first name with no space. Upload the file to CMS.

Problem 13.11 (Page 529) [20 marks total]

[3 marks] Submit your UML in a word file.

3 marks for correct implementation and demonstration of Cloneable, 4 marks for the correct implementation and demonstration of Comparable, 10 marks for the rest.

Problem 14.5 (Page 579) MODIFICATION: *Change the text to say "My name is xxxxx" where xxxxx is your name.*

Part B: Write code and test the solutions for the following problems from the textbook. Submit the .java files for each question to CMS. The answers are due on June 09th and the programs are to be demonstrated to the Teaching Assistant (Tyler) by June 10th. He will ask questions to make sure you understand the material.

Problem 13.5 (Page 530) [10 marks]

For this program, ask the user for the sizes of the two test circles and two test rectangles before reporting the results of your max() method. 2 marks are reserved for UML diagrams. Submit your UML in a word document

Problem 14.13 (Page 580) ADDITIONAL REQUIREMENT: *This program must be designed so that the percentages for each pie segment are first stored in an array of doubles so that Tyler can change them to see that the pie chart changes. The number of pieces will equal the length of the array. You can assume a maximum of eight pieces.*

Problem 14.15 (Page 556) *Show two versions of the stop sign: STOP and ARRET. The sign must be centered and if the stage is resized, the sign should remain in the center (binding property).*