Circle Intersection Checker

Introduction | Problem | Solution

Demonstration of Spatial Relations of Circles
Assignment for
Java, GUI and Visualization: CS5405

Author: Raja Sekhar Pothina (rp6kp@umsystem.edu)

1. This is my orignal code, No IDE used in the submission.
2. I did not give my code to anyone or I did not use anyone's code in this work.

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This HW is a variation of HW05 based problem 14.21 and 14.22 on page 590 in the book. As this is a followup on HW05, Next HW will be based on this HW06. It is better not to skip this. It is better to do it right now, you can use it in the next assignment.
1. Create data directory to include infile.txt to read it into the textfield.
2. Create a Prompt for the user to input values in the textfield.
3. The program reads input: center x1,y1, radius r1, for first circle(blue), then center x2,y2, radius r2, for circle(red) from the textfield. You will use integers for pixel coordinates and double for radius.
Good practice: Read all numbers as one text string and split it into array of string elements, convert the component strings into appropriate format
Program determines the spatial relation which can is the case

1. Equal
2. Disjoint
3. Externally Touching (Trivial intersect)
4. Proper overlap (non-trivial intersect. none is completely inside the other)
5. C1 is inside C2 , not touching
6. C1 is inside C2 , touching
7. C2 is inside C1 , not touching
8. C2 is inside C1 , touching
Add a button to select a circle out of two circles.
Add slider interaction to update radius of the circle.
Add mouse interaction to update center of the circle.

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Circles 1(blue) intersects Circle 2(red)

100.00 100.00 50.00 80.00 80.00 40.00

Switch to Circle 2

30 55 80 105 130 155 180 205 230 255 280 300