CS225 Homework 6

Point Cloud: File I/O

Deliverables: You will deliver 5 files as follows (Note: You may not be using all of these files; turn them in anyways):

1. The Manager.java file from HW2, modified as needed.
2. The Cloud.java file, from HW 2, without modification (unless HW 2 goals were not met; in that case you may modify to correct the errors).
3. The WeightedCloud.java file from HW03, without modification (unless HW 3 goals were not met, in that case you may modify to correct the errors).
4. The CloudGUI.java file that displays point clouds as described below. Only one stage is required for HW 5, though you may choose to display two stages as was done in HW4.
5. The CloudPane.java file from HW4, modified as needed. This is the class that displays the point cloud.

Only electronic documents submitted via Canvas are acceptable. Do not submit a hard copy of your assignment. Do not email your assignment to the course instructor or grader. You may submit the deliverables as individual files or provide as a single zipped file, either is acceptable.

Important: Late assignments will not be graded.

Problem Description: Use the definitions regarding point clouds given in previous assignments.

For this assignment modify the files turned in for HW5 as follows:

1. Add a button to the GUI that saves the current point cloud in a file named “cloud.dat.” You need only save the x and y locations of the points. You do not need to save the closest pair, furthest pair, or center of mass.
2. Add a button to the GUI to retrieve the data from the “cloud.dat” file. The GUI should display only the saved cloud.

Software Requirements:

There are no formal requirements for this assignment.

Test Cases: There are no predefined test cases for this assignment. The grader will base the grade on interactions using the buttons.

Instructions: Modify the files used for HW 4 to complete this assignment.

Rubric: Per that grading rubric below.

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| **Deliverable** | **Points** | **Awarded** |
| Code compilation | 5 |  |
| Correct behavior for each button | 30 |  |
| Totals | 35 |  |