CSE241 – ASSIGNMENT 7 COMMENTS.PDF

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Homework.java

In this class of my homework, I've read data.txt into a string then took pieces from it to fill an array. Then I immediately created an object from Solver class and called its constructor with this array.

Then my class gets the required information with getters of Solvers class and fills the array sn. JFrame adjustments were made then the Drawline class was summoned.

Solver.java

This class is the primary class that actually makes the calculations. Takes an array from Homework class and creates its own array with it.

cornerCalc function takes this array and calculates the corners of every building, fills an array with this information.

Then engine comes. Firsly createSys finds the bounds of the coordinate plane and saves it.

Then engine finds the left-bottom point of the first building, that will be our starting point.

Addes that point to the results array and goes into the main loop of the whole calculation, there is a order of priority. Up -> Right -> Down.

Finally takes the right-bottom point if necessary and prints the skyline points to the screen.

Functions:

İsCorner, checks a coordinate if it's a building's corner or not.

İsEdge, checks a coordinate if it's a building's edge or not.

İsEdge2, checks if the recent edge of a building is an edge of another building at the same time.

AddCoord, adds the coordinate to result array.

İsJunction, uses isEdge and isEdge2 to find a junction point.

İsExisting, checks if the coordinate is already in result array.

GoUp, goDown and goRight. Simply moves between corners to find the skyline points. GoUp gets canceled if the recent move is goDown.

Checks if the next point (+1) is a corner or not, then considers it. If not, moves until it comes across a corner or junction or divergent. A divergent is a point that is a corner of a building and edge of another building or more.

I had to consider them when going down (goDown) particularly in order to correct my code.

DrawLine.java

Simply takes the data that Solver.java had calculated then draws lines to screen. But it draws it reversely so I had to subtract the y-axis' from 600 to correct it for this example.

Written via NetBeans IDE. Please excuse my lack of Makefile, I couldn't make a proper one in time.