Problem Set 4

Making Polygons with Positional Lists and More Linked List Fun

Due October 16th, 2014 11:58pm

In the pygame part of this homework, you will write two programs. In each of them, you click on the screen to draw the vertices of a polygon. In the first program, you will be able to move the polygon around after it is drawn. In the second program, you will be able to add a vertex to a polygon after it is drawn.

In the nonpygame part of this homework, you will do something similar to what we did in recitation. You will find a file called morework.py which will have more specific instructions. *Make sure that your file has all the if-statements set to true when you submit!*

Requirements

In the pygame, you must use a linked list. You may use any of the code from chapter 7 book (so you could use the PositionalList class, the _doubly_linked_base class, etc.) or from class.

In the nonpygame part, you must do the first two tasks in constant time. The third task may have a linear time solution.

How to get an A

Just do the third task (reversing a linked list) in constant time. That is the only way to get an A. Fancy pygame stuff will not get you anything.

Submission

Upload to google drive. No need to zip the files, just put them in a folder named like XieBenjaminPset4. *Do not submit your code in PDF form (ever again).*