CS 150 - Layers & Animations

Announcements

- HW1 - due Sat by midnight
Suggested Reading:
Section 3.5 (p. 106-108) in book
A case study with lots of examples
Layers
Group separate elements together.
Ex: A car

Problem: How to move it?
A layer is a combination of a drawable object + a canvas.

Think of a transparency - its own canvas, almost - which we will "attach" to our canvas.

Note: Layers have their own coordinates!

The layer's (0,0) is where the "tack" goes.
Animation

Repeated moves will change our picture, but this happens fast.
Solution: use "sleep" command.

Add: from time import sleep

sleep(timeDelay)
(Where timeDelay = 0.2 seconds, for example)
Flickering or auto refresh

If you have a big scene, you may notice strange things – for example, moves may refresh the screen so that things don’t move uniformly.

Can turn off auto-re-drawing:
    paper.setAutoRefresh(false)

but if you do, will have to manually refresh (often):

    paper.refresh()