

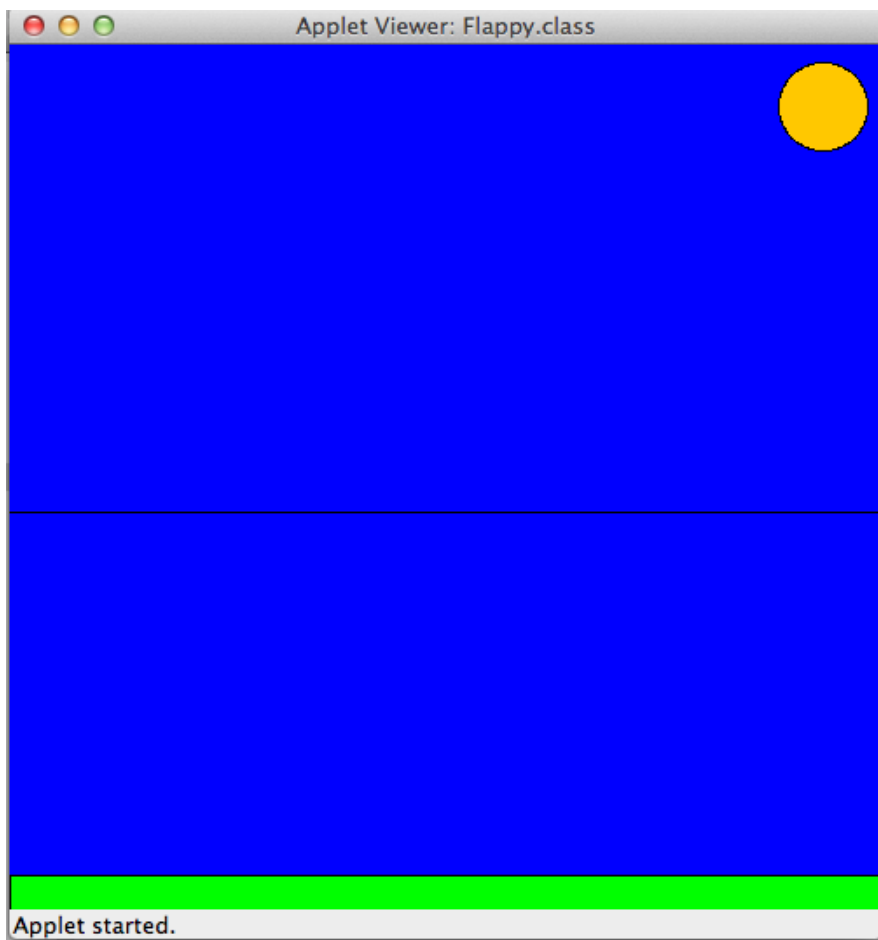
FlappyBird

The Story:

Since spring is here and the sun is shining, instead of studying programming, FlappyBird wants to be out on the grass and jump. But first of all, it needs to be drawn on the screen and then directed accordingly. In frustration, it asks your help to succeed.

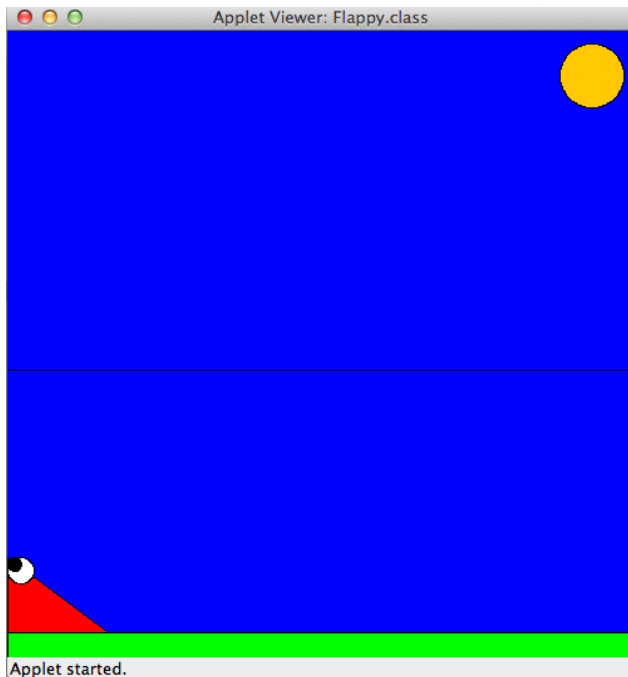
The Environment:

Firstly, run the starter code to see the provided environment. You should see something like below. For now, you may ignore the black line in the middle.



The Bird:

Secondly, you need to place the bird on the screen by complying the rules below.



Rules:

Bird will be composed of a beak and an eye sharing the same upper leftmost x,y.

Beak Implement the beak as a right triangle using GPolygon. Left Edge 60, Bottom Edge 80

Eye Implement the eye as composed of two GOvals having the same upper leftmost x,y but black one is smaller than the white. Black radius 5, White radius 10

To compose the bird, use GCompound to hold the beak and the eye together.

Hint: When placing the bird, you should use the height of the grass which is given as GRASS_HEIGHT.

The Jump:

To accomplish the jump, the bird needs to move:

- with constant speed (Dx) on the x axis
- with changing speed (Dy) on the y axis.
- Dy values must range between: $\{-Dy_MAX, -Dy_MAX+1, \dots, -1, 0, 1, \dots, Dy_MAX-1, Dy_MAX\}$

And:

- Use provided Dx and Dy_MAX constants but you should define and alter Dy.
- Use pause() with provided PAUSE_TIME to animate the jump.
- You can verify the jump by looking at the black line. At the top, when the speed on the y axis is 0, the bird should be just on the black line otherwise check your code, you are missing something.

Jump Snapshots:

