Flappy Bird Project Requirements

Game Rules:

In Flappy Bird, you control a brave bird that hurtles along a 2D landscape. You avoid obstacles that come from the right. Any collision with an obstacle ends the game. Your score is computed by the number of obstacles you successfully avoid.

You will create the following classes:

Bird Class:

1. Location, velocity, and acceleration are computed using PVectors.
2. Constantly accelerates downward at a constant rate (gravity).
3. Accelerates towards the mouse when (and only when) the mouse is clicked.
4. Rotates accordingly as the bird accelerates. A positive acceleration has the bird tilt upward, a negative acceleration has the bird rotate downward.
5. Calculates collisions with Obstacle objects and the ground. A bird cannot fly over the obstacles off screen.

Obstacle Class:

1. Location and velocity are computed using PVectors.
2. Obstacles move from right to left. As they disappear off the left side of the screen, they reappear on the right.
3. An obstacle has a top and bottom component. A bird must fly between these two components to successfully pass it.

Other Game Features:

1. Sound effects and Soundtrack using the Minim library.
2. Animated background that features a scrolling 2D world.
3. Animated ground that features a scrolling 2D surface.
4. Start screen that displays instructions of how to play the game.
5. Pause screen that pauses the action and hides the game screen.
6. End screen that displays your score and highest score.