Assignment 3 - Due March 3
Flappy Bird

Goals

Animation
Touch
Drawing

App description

We will implement a version of the app called "Flappy Bird". There are a lot of Flappy bird imitations on line and in app stores. Be careful about downloading imitation Flappy Bird imitations from the App store as some of them have malware in them. Here is the description of the game from wikipedia:

"*Flappy Bird* is a side-scrolling mobile game featuring 2D retro style graphics. The objective is to direct a flying bird, which moves continuously to the right, between each oncoming set of pipes without colliding with them, which otherwise ends the game. The bird briefly flaps upward each time the player taps the screen. If the screen is not tapped, the bird falls due to gravity. The player is scored on the number of pipe sets the bird successfully passes through, with medals awarded for the score."
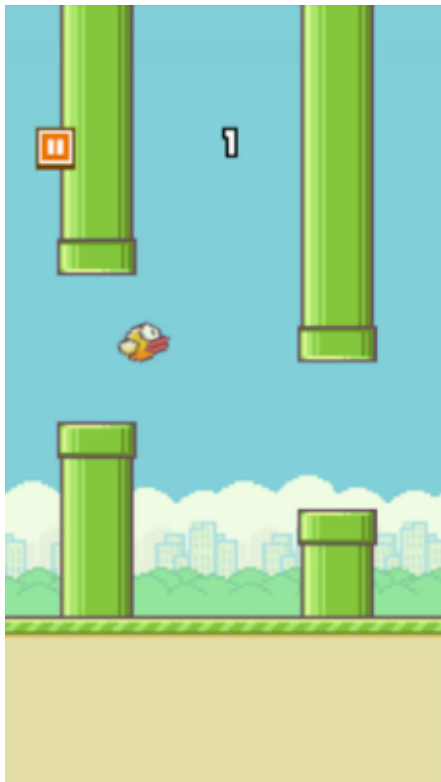
Here is a screen shot of the game. The bird does not actually move forward. The bird only moves up or down. The background moves from the right to the left to give the impression that the bird is flying forward.

In our version of flappy bird the bird will behave as in the original. It will move up when the user touches the screen. The longer the user touches the screen the higher the bird goes. When the user is not touching the screen the bird slowly sinks. If the bird hits the top or the bottom of the screen the game ends. While the bird is flying it flaps its wings.

In our version rather than having images of pipes we will draw rectangles. We will have only one set of rectangles. One coming from the top of the screen and one coming from the bottom of the screen with a gap between them. The rectangles will start at the right side of the screen and slowly moves to the left until they reach the left side of the screen. The game will end when either the bird hits rectangles/top/bottom or rectangles reach the left side.

Grading

Points	Item
15	Bird flaps wings
15	Bird moves up smoothly when user touches the screen
15	Bird moves down smoothly when the user is not touching the screen
20	Can draw the set of rectangles
15	Rectangles move slowly to the left
15	Detecting when the bird hits the rectangles
5	Detecting when the bird hits the top or bottom of the screen