PyGame Flappy Bird Tutorial - Part 3

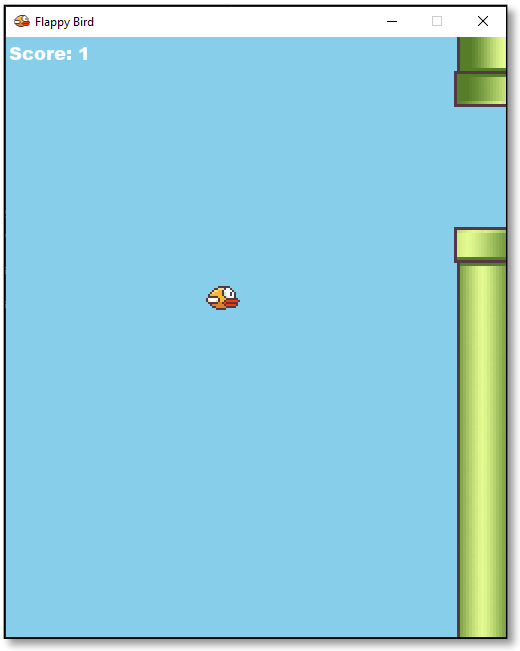
Contents

Time required: 30 minutes

Preview of the Game

Here's a sneak peak of the game that we are going to work on.

Flappy Bird Demo Video



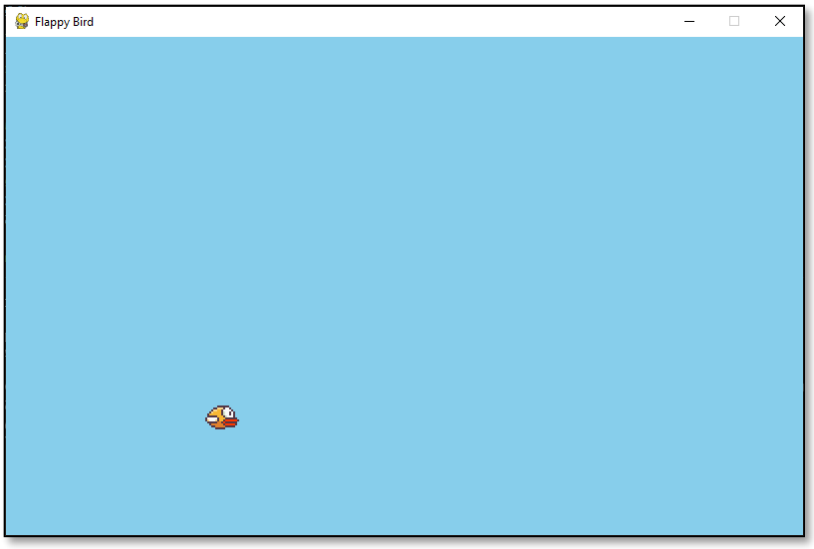
Flappy Bird in Flight

We drew the background and the bird. It is time to fly!

Save **flappy_bird_2.py** as **flappy_bird_3.py**

```
62  # ---------------------- GAME LOOP ------------------------------------#
63      def game_loop(self):
64          """Infinite game loop"""
65          while True:
66              self.check_events()
67              # Simulate gravity by moving the bird down
68              # unless the UP key is pressed
69              # Reset gravity to 3 each time through the loop
70              gravity = 3
71
72              # Get list of keys being pressed
73              key_input = pygame.key.get_pressed()
74
75              # If up cursor pressed, move up 5 pixels
76              if key_input[pygame.K_UP]:
77                  gravity -= 5
78
79              # Move the bird
80              self.bird_rect.y = self.bird_rect.y + gravity
81
82              # ---------------- DRAW ON BACKBUFFER -------------------------#
83              # Draw everything on the backbuffer first
84              # Fill the display surface with blue
85              self.surface.fill(config.SKY_BLUE)
86
87              # Draw bird to the backbuffer
88              self.surface.blit(
89                  self.bird,      # Source image
90                  self.bird_rect  # Destination location of image
91              )
92
93              # -------------- UPDATE SURFACE -------------------------------#
94              # From backbuffer, update Pygame display to reflect any changes
95              pygame.display.update()
96
97              # Cap game speed at 60 frames per second
98              self.clock.tick(60)
```

Example run:



The bird goes up and down with the up cursor key on the keyboard.

Not very exciting . . . yet. Stay tuned for the next tutorial.

Assignment Submission

1. Attach all tutorials and assignments.
2. Attach screenshots showing the successful operation of each tutorial program.
3. Submit in Blackboard.