```
1 #Vaibhav Choudhary gau7jk
 2
 3 import uvage
 4 import random
 5
 6 camera = uvage.Camera(800, 600)
 7 game_true = False
 8 game_false = True
 9 \text{ score} = 0
10 y_coordinate = 0
11
12 # where the camera begins
13 \text{ camera.x} = 400
14 \text{ camera.y} = 350
15
16 # components of the game
17 player = uvage.from_color(600, 500, "cyan", 15, 15)
18 floor = []
19
20 def tick():
21
       qlobal score
22
       global game_true
23
       global game_false
24
       global floor
25
       global player
26
       global y_coordinate
27
       global stop
28
29
       stop = uvage.from_color(400, camera.y - 300, "
   cyan", 800, 40)
30
       # The player can start the game by clicking on
31
   the mouse
32
       if camera.mouseclick:
33
           qame_true = True
34
           game_false = False
35
36
       def visual():
37
38
           This function creates the background for
   the game.
```

```
39
           :return: This function does not return
   anything.
           11 11 11
40
41
           global stop
           global floor
42
43
           camera.clear("black")
44
           camera.draw(stop)
45
46
47
           if game_true == True:
48
               for each in floor:
49
                    camera.draw(each)
50
51
           player.draw(camera)
52
53
       def instructions():
54
55
           This function explains what happens once
   the player begins the game by clicking the down
   arrow key.
56
           The function shows how each of the floors
   are created using a random number generator.
57
           :return: none
           11 11 11
58
59
           global game_true
60
           global y_coordinate
61
           qlobal floor
62
           qlobal score
63
           if game_true == True:
               if game_false == False:
64
65
                    player.move_speed()
                    camera.move(0, 1)
66
67
68
           if game_true == True:
69
                if qame_false == False and score % 60
    == 0:
70
                    left_floor = random.randint(0, 299)
71
                    left_width = 2 * left_floor
72
                    right_floor = (800 + left_width +
   75) * (1/2)
73
                    right_width = 800 - (left_width +
```

```
73 75)
 74
 75
                     floor.append(uvage.from_color(
    left_floor, camera.y + 300, "red", left_width, 15
    ))
 76
                     floor.append(uvage.from_color(
    right_floor, camera.y + 300, "red", right_width,
    15))
 77
                     y_coordinate = y_coordinate + 100
 78
                 if game_false == True:
 79
                     y_coordinate = y_coordinate + 0
 80
 81
        def x_move():
             11 11 11
 82
 83
            This function explains what each key does
    to move the player along the x-plane.
             :return: This function does not return
 84
    anything.
             11 11 11
 85
            if uvage.is_pressing("right arrow"):
 86
 87
                 if player.x != 800:
 88
                         player.x += 10
            if uvage.is_pressing("left arrow"):
 89
 90
                 if player.x != 0:
 91
                         player.x -= 10
 92
 93
        def y_move():
 94
 95
            This function explains how the camera
    moves with relation to the player's position.
 96
             :return: This function does not return
    anything.
             11 11 11
 97
 98
            if player.y > camera.y + 250:
 99
                 player.y = camera.y + 250
100
            elif player.y == camera.y + 250:
101
                 player.y = camera.y + 250
102
            elif player.y < camera.y + 250:</pre>
103
                 player.y
104
105
```

```
106
107
        def touch():
108
109
             This function explains what happens when
    the player interacts with the floors.
110
             :return: This function does not return
    anything.
111
112
            qlobal floor
113
            for each in floor:
114
                 if player.touches(each):
115
                     player.yspeed = 0
116
            else:
117
                 player.yspeed = player.yspeed + 0.25
118
119
            for wall in floor:
120
                 if player.touches(wall):
                     player.yspeed = 0
121
122
123
        visual()
124
125
        def displays():
             11 11 11
126
127
             This function explains what is displayed
    on the screen during the game.
128
             :return: This function does not return
    anything.
             11 11 11
129
130
131
            qlobal qame_true
132
            global game_false
133
            global score
134
            global stop
135
136
            if game_true == True:
137
                 if game_false == False:
138
                     camera.draw(uvage.from_text(700,
    500 + score, str(score), 40, "magenta", bold =
    True))
139
140
            if game_true == False:
```

```
if game_false == True:
141
142
                    camera.draw(uvage.from_text(400,
    250, "Press the mouse to start!", 60, "white",
    bold = True))
143
144
            if player.top_touches(stop):
145
                camera.move(0,0)
146
                camera.draw(uvage.from_text(camera.x,
147
    camera.y, "Game Over!", 50, "red"))
148
                game_true = False
149
                qame_false = True
150
151
152
        displays()
153
        instructions()
154
155
        x_move()
156
        y_move()
157
        touch()
158
        camera.display()
159
160
        score += 1
161
162
163
164 ticks_per_second = 30
165 uvage.timer_loop(ticks_per_second, tick)
```