PyGame Tractor Pong Tutorial - Part 6

Contents

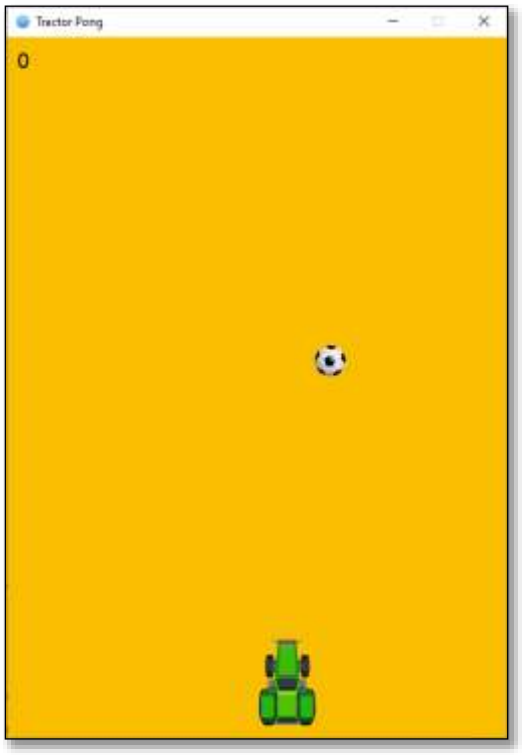
Time required: 30 minutes

Preview of the Game

Atari. - the year: 1973 - the date: - November 29th -

That game is called Pong . . . . Then there was Tractor Pong.

Tractor Pong Demo Video



Collision Time

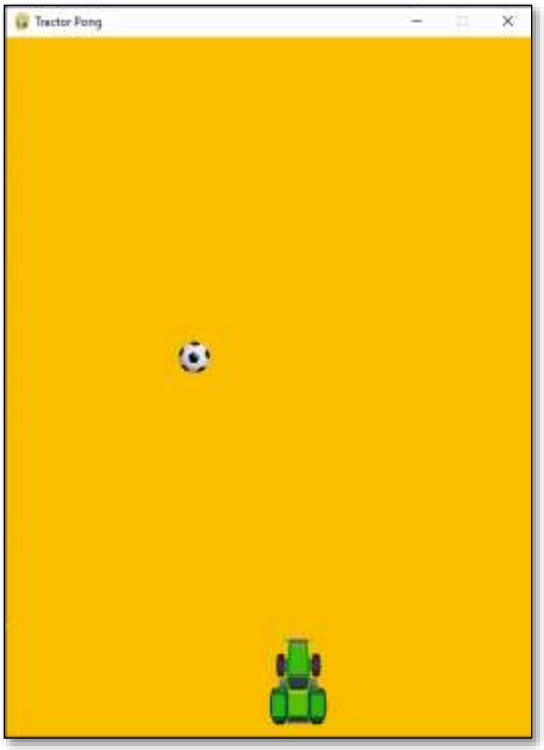
1. Save **tractor_pong_5.py** as **tractor_pong_6.py**
2. Add the check_collision method call to the game loop

```
63  # ---------------------------- GAME LOOP ---------------------------------#
64      def game_loop(self):
65          """Infinite game loop"""
66          while True:
67              self.check_events()
68              self.update_tractor()
69              self.update_ball()
70
71              self.check_collision()
72
73              self.draw()
74
75              # Cap game speed at 60 frames per second
76              self.clock.tick(60)
```

Add the check collision method.

```
147     # ---------------------- CHECK COLLISION ------------------------------ #
148     def check_collision(self):
149         """Check for collision between two rects"""
150         # The ball has to be above the tractor to collide
151         # Does the ball collide with the tractor?
152         # If so, reverse the ball y direction [1]
153         if (
154             self.tractor_rect.colliderect(self.ball_rect)
155             and self.ball_rect.bottom < self.tractor_rect.top + 4
156         ):
157 
158             # Reverse y direction
159             self.speed_y = self.speed_y * -1
160 
161             # Randomly change x direction
162             direction = randint(0, 1)
163             if direction == 0:
164                 self.speed_x = self.speed_x * -1
165 
166             # Increase speed by 10% each time the ball is hit
167             self.speed_x = self.speed_x * 1.05
168             self.speed_y = self.speed_y * 1.05
```

Example run:



The tractor is under control.

Time to finish our game with a game over screen, some sounds, and scoring.

Assignment Submission

1. Attach a screenshot showing the operation of the program.
2. Zip up the program files folder and submit in Blackboard.