PyGame Tractor Pong Tutorial - Part 6

Contents

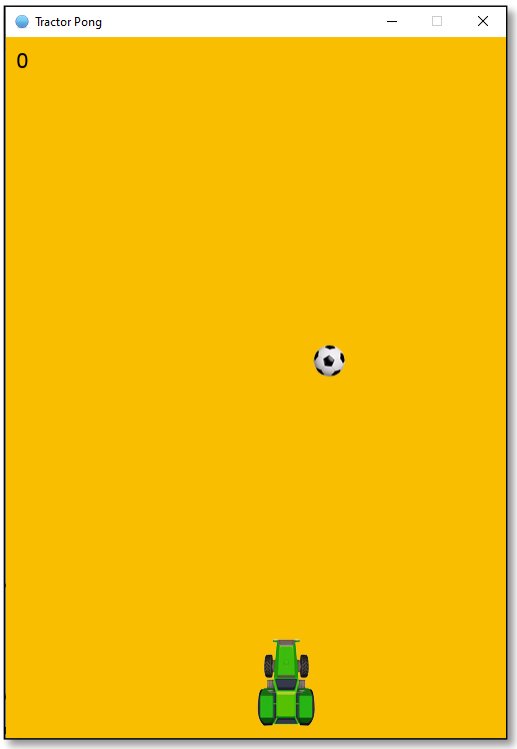
Time required: 30 minutes

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

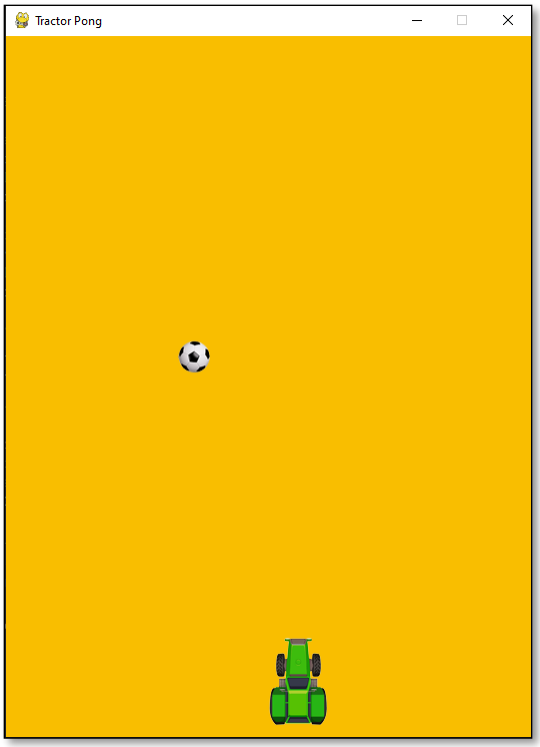
1. Save **tractor_pong_5.py** as **tractor_pong_6.py**
2. Add the check_collision method call to the game loop

```
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.

```
254  # ---------------------- CHECK COLLISION ----------------------------------#
255      def check_collision(self):
256          """Check for collision between two rects"""
257          # The ball has to be above the tractor to collide
258          # Does the ball collide with the tractor?
259          # If so, reverse the ball y direction [1]
260          if self.tractor_rect.colliderect(
261              self.ball_rect
262          ) and self.ball_rect.bottom < self.tractor_rect.top + 4:
263
264              # Reverse y direction
265              self.speed_y = self.speed_y * -1
266
267              # Randomly change x direction
268              direction = randint(0, 1)
269              if direction == 0:
270                  self.speed_x = self.speed_x * -1
271
272              # Increase speed by 10% each time the ball is hit
273              self.speed_x = self.speed_x * 1.05
274              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 all tutorials and assignments.
2. Attach screenshots showing the successful operation of each tutorial program.
3. Submit in Blackboard.