PyGame Car Crash Tutorial 4 Part 4

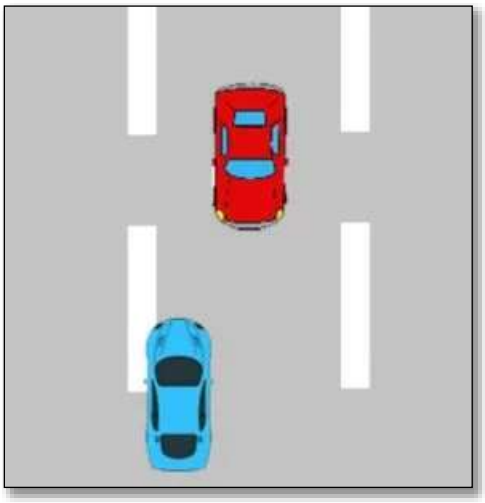
Contents

Time required: 30 minutes

Preview of the Game

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

Car Crash Demo Video



Car Crash is simple arcade type game. The object is to move your blue car back and forth to avoid the oncoming red cars.

Enemy Class

The player class stays the same. The enemy class is almost the same as the player class.

Open **player.py** and save it as **enemy.py**

```python
"""
    Name: enemy.py
    Author:
    Date:
    Purpose: All logic for the enemy's car is in this class
"""
# Import modules
import pygame
from random import randint
import config


class Enemy(pygame.sprite.Sprite):
    """Define the enemy class and methods"""

# ----------------------- INITIALIZE ENEMY SPRITE -----------------------#
    def __init__(self):
        """Construct an enemy object from Sprite class"""

        # Call the constructor of the superclass (pygame.sprite.Sprite)
        super().__init__()

        # Load enemy car image from file into a variable
        self.image = pygame.image.load(
            "./assets/enemy.png").convert_alpha()

        # Get the rectangle area of the player car surface
        self.rect = self.image.get_rect()

        # Get a random location 40 pixels away from the left and the right.
        x = randint(40, config.WIDTH - 40)

        # y is -75, the car starts above the program window
        y = -75

        # Move car to initial position
        self.rect.move_ip((x, y))
```

CarCrash Class

1. Open **car_crash_3.py** and save as **car_crash_4.py**

2. Change the code to the following. The minor changes are marked in green.

```
"""
Name: car_crash_4.py
Author:
Date:
Purpose: Draw both cars
"""

# https://pypi.org/project/pygame-ce
# pip install pygame-ce
# Import pygame library
import pygame
from sys import exit
import config

# Import player and enemy class
import player
import enemy
```

3. Add the enemy sprite to the create_sprites method.

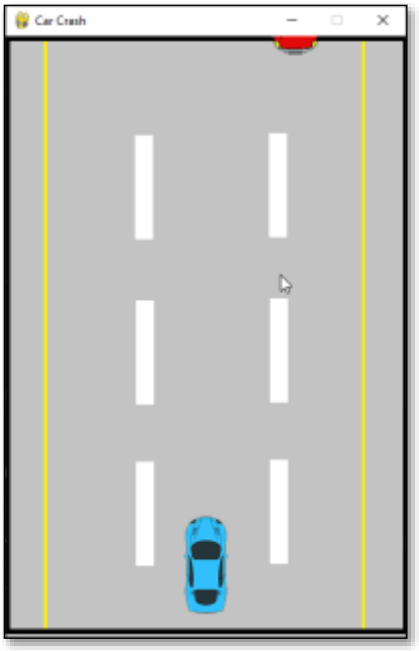
```
    # ------------------------ CREATE SPRITES ----------------------------- #
    def create_sprites(self):
        # Create a Player and Enemy sprite object
        self.player_sprite = player.Player()
        self.enemy_sprite = enemy.Enemy()

        # Create Sprites Groups, add Sprites to Groups
        # A separate enemies group is created,
        # to allow for more enemy Sprites later on if needed
        self.enemies = pygame.sprite.Group()
        self.enemies.add(self.enemy_sprite)

        # This group includes all Sprites
        self.all_sprites = pygame.sprite.Group()
        self.all_sprites.add(self.player_sprite)
        self.all_sprites.add(self.enemy_sprite)
```

With sprite groups we can more easily manage multiple sprites.

Example run:



This is how the game will look at this stage. The blue player car and the red enemy car are drawn on the screen. The enemy car will appear randomly on the X axis for each program run. Movement will be added later.

Assignment Submission

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