

```
import pygame, random, sys, os, time
from pygame.locals import *

WINDOWWIDTH = 800
WINDOWHEIGHT = 600
TEXTCOLOR = (255, 255, 255)
BACKGROUNDCOLOR = (4, 4, 4)
FPS = 40

BADDIEMINSIZE = 10
BADDIEMAXSIZE = 40
BADDIEMINSPEED = 8
BADDIEMAXSPEED = 8
ADDNEWBADDIERATE = 6
PLAYERMOVERATE = 5
count = 3
topScore=0

def terminate():
    pygame.quit()
    sys.exit()

def waitForPlayerToPressKey():
    while True:
        for event in pygame.event.get():
            if event.type == QUIT:
                terminate()
            if event.type == KEYDOWN:
                if event.key == K_ESCAPE: # escape quits
                    terminate()
        return
```

```
def playerHasHitBaddie(playerRect, baddies):
    for b in baddies:
        if playerRect.colliderect(b['rect']):
            return True
    return False
```

```
def drawText(text, font, surface, x, y):
    textobj = font.render(text, 1, TEXTCOLOR)
    textrect = textobj.get_rect()
    textrect.topleft = (x, y)
    surface.blit(textobj, textrect)
```

```
pygame.init()
mainClock = pygame.time.Clock()
windowSurface = pygame.display.set_mode((WINDOWWIDTH, WINDOWHEIGHT))
pygame.display.set_caption('car race')
pygame.mouse.set_visible(False)
```

```
playerImage = pygame.image.load('car1.png')
car3 = pygame.image.load('car3.png.jpg')
car4 = pygame.image.load('car4.png')
playerRect = playerImage.get_rect()
baddieImage = pygame.image.load('car2.png')
sample = [car3, car4, baddieImage]
wallLeft = pygame.image.load('left.png')
wallRight = pygame.image.load('right.png')
```

```

font = pygame.font.SysFont(None, 42)

drawText('PRESS ANY KEY TO START THE GAME!', font, windowSurface, (WINDOWWIDTH / 3)
- 137, (WINDOWHEIGHT / 3)+80)

pygame.display.update()

waitForPlayerToPressKey()

zero = 0

while (count > 0):
    baddies = []
    score = 0
    playerRect.topleft = (WINDOWWIDTH / 2, WINDOWHEIGHT - 50)
    moveLeft = moveRight = moveUp = moveDown = False
    reverseCheat = slowCheat = False
    baddieAddCounter = 0

    while True:
        score += 1

        for event in pygame.event.get():

            if event.type == QUIT:
                terminate()

            if event.type == KEYDOWN:
                if event.key == ord('z'):
                    reverseCheat = True
                if event.key == ord('x'):
                    slowCheat = True
                if event.key == K_LEFT or event.key == ord('a'):
                    moveRight = False

```

```
        moveLeft = True
if event.key == K_RIGHT or event.key == ord('d'):
    moveLeft = False
    moveRight = True
if event.key == K_UP or event.key == ord('w'):
    moveDown = False
    moveUp = True
if event.key == K_DOWN or event.key == ord('s'):
    moveUp = False
    moveDown = True

if event.type == KEYUP:
    if event.key == ord('z'):
        reverseCheat = False
        score = 0
    if event.key == ord('x'):
        slowCheat = False
        score = 0
    if event.key == K_ESCAPE:
        terminate()

if event.key == K_LEFT or event.key == ord('a'):
    moveLeft = False
if event.key == K_RIGHT or event.key == ord('d'):
    moveRight = False
if event.key == K_UP or event.key == ord('w'):
    moveUp = False
if event.key == K_DOWN or event.key == ord('s'):
    moveDown = False
```

```

if not reverseCheat and not slowCheat:
    baddieAddCounter += 1
if baddieAddCounter == ADDNEWBADDIERATE:
    baddieAddCounter = 0
    baddieSize = 30
    newBaddie = {'rect': pygame.Rect(random.randint(140, 485), 0 -
baddieSize, 23, 47),
                'speed': random.randint(BADDIEMINSPEED, BADDIEMAXSPEED),
                'surface': pygame.transform.scale(random.choice(sample),
(23, 47)),
                }
    baddies.append(newBaddie)
    sideLeft = {'rect': pygame.Rect(0, 0, 126, 600),
                'speed': random.randint(BADDIEMINSPEED, BADDIEMAXSPEED),
                'surface': pygame.transform.scale(wallLeft, (126, 599)),
                }
    baddies.append(sideLeft)
    sideRight = {'rect': pygame.Rect(497, 0, 303, 600),
                 'speed': random.randint(BADDIEMINSPEED, BADDIEMAXSPEED),
                 'surface': pygame.transform.scale(wallRight, (303, 599)),
                 }
    baddies.append(sideRight)

if moveLeft and playerRect.left > 0:
    playerRect.move_ip(-1 * PLAYERMOVERATE, 0)
if moveRight and playerRect.right < WINDOWWIDTH:
    playerRect.move_ip(PLAYERMOVERATE, 0)
if moveUp and playerRect.top > 0:
    playerRect.move_ip(0, -1 * PLAYERMOVERATE)
if moveDown and playerRect.bottom < WINDOWHEIGHT:

```

```

    playerRect.move_ip(0, PLAYERMOVERATE)

for b in baddies:
    if not reverseCheat and not slowCheat:
        b['rect'].move_ip(0, b['speed'])
    elif reverseCheat:
        b['rect'].move_ip(0, -5)
    elif slowCheat:
        b['rect'].move_ip(0, 1)

for b in baddies[:]:
    if b['rect'].top > WINDOWHEIGHT:
        baddies.remove(b)

font = pygame.font.SysFont(None, 38)
windowSurface.fill(BACKGROUNDCOLOR)
drawText('Score: %s' % (score), font, windowSurface, 128, 0)
drawText('Top Score: %s' % (topScore), font, windowSurface, 128, 21)
drawText('Rest Life: %s' % (count), font, windowSurface, 128, 41)

windowSurface.blit(playerImage, playerRect)

for b in baddies:
    windowSurface.blit(b['surface'], b['rect'])

pygame.display.update()

if playerHasHitBaddie(playerRect, baddies):
    if score > topScore:
        topScore = score

```

```
break
```

```
mainClock.tick(FPS)
```

```
count = count - 1
```

```
time.sleep(1)
```

```
font = pygame.font.SysFont(None, 52)
```

```
if (count == 0):
```

```
    drawText('Game Over', font, windowSurface, (WINDOWWIDTH / 3)+40,  
(WINDOWHEIGHT / 3)+70)
```

```
    drawText('Press any key to play again.', font, windowSurface,  
(WINDOWWIDTH / 3) - 110, (WINDOWHEIGHT / 3) + 95)
```

```
    pygame.display.update()
```

```
    time.sleep(2)
```

```
    waitForPlayerToPressKey()
```

```
    count = 3
```