import pygame  
import random  
  
# Инициализация Pygame  
pygame.init()  
  
# Цвета  
white = (255, 255, 255)  
yellow = (255, 255, 102)  
black = (0, 0, 0)  
red = (213, 50, 80)  
green = (0, 255, 0)  
blue = (50, 153, 213)  
  
# Параметры дисплея  
dis\_width = 800  
dis\_height = 600  
dis = pygame.display.set\_mode((dis\_width, dis\_height))  
pygame.display.set\_caption('Змейка от Skillbox')  
  
# Настройка времени  
clock = pygame.time.Clock()  
snake\_block = 10  
snake\_speed = 15  
  
# Шрифты  
font\_style = pygame.font.SysFont("bahnschrift", 25)  
score\_font = pygame.font.SysFont("comicsansms", 35)  
  
def Your\_score(score1, score2):  
 value1 = score\_font.render("Счёт Игрока 1: " + str(score1), True, yellow)  
 value2 = score\_font.render("Счёт Игрока 2: " + str(score2), True, yellow)  
 dis.blit(value1, [0, 0])  
 dis.blit(value2, [0, 30])  
  
def our\_snake(snake\_block, snake\_list):  
 for x in snake\_list:  
 pygame.draw.rect(dis, black, [x[0], x[1], snake\_block, snake\_block])  
  
def message(msg, color):  
 mesg = font\_style.render(msg, True, color)  
 dis.blit(mesg, [dis\_width / 6, dis\_height / 3])  
  
def gameLoop():  
 game\_over = False  
 game\_close = False  
  
 # Игрок 1  
 x1 = dis\_width / 4  
 y1 = dis\_height / 2  
 x1\_change = 0  
 y1\_change = 0  
 snake\_List1 = []  
 Length\_of\_snake1 = 1  
  
 # Игрок 2  
 x2 = dis\_width \* 3 / 4  
 y2 = dis\_height / 2  
 x2\_change = 0  
 y2\_change = 0  
 snake\_List2 = []  
 Length\_of\_snake2 = 1  
  
 # Еда  
 foodx = round(random.randrange(0, dis\_width - snake\_block) / 10.0) \* 10.0  
 foody = round(random.randrange(0, dis\_height - snake\_block) / 10.0) \* 10.0  
  
 while not game\_over:  
 while game\_close:  
 dis.fill(blue)  
 message("Вы проиграли! Нажмите Q для выхода или C для повторной игры", red)  
 Your\_score(Length\_of\_snake1 - 1, Length\_of\_snake2 - 1)  
 pygame.display.update()  
  
 for event in pygame.event.get():  
 if event.type == pygame.KEYDOWN:  
 if event.key == pygame.K\_q:  
 game\_over = True  
 game\_close = False  
 if event.key == pygame.K\_c:  
 gameLoop()  
  
 for event in pygame.event.get():  
 if event.type == pygame.QUIT:  
 game\_over = True  
  
 # Управление Игрока 1  
 if event.type == pygame.KEYDOWN:  
 if event.key == pygame.K\_LEFT and x1\_change == 0:  
 x1\_change = -snake\_block  
 y1\_change = 0  
 elif event.key == pygame.K\_RIGHT and x1\_change == 0:  
 x1\_change = snake\_block  
 y1\_change = 0  
 elif event.key == pygame.K\_UP and y1\_change == 0:  
 y1\_change = -snake\_block  
 x1\_change = 0  
 elif event.key == pygame.K\_DOWN and y1\_change == 0:  
 y1\_change = snake\_block  
 x1\_change = 0  
  
 # Управление Игрока 2  
 if event.type == pygame.KEYDOWN:  
 if event.key == pygame.K\_a and x2\_change == 0:  
 x2\_change = -snake\_block  
 y2\_change = 0  
 elif event.key == pygame.K\_d and x2\_change == 0:  
 x2\_change = snake\_block  
 y2\_change = 0  
 elif event.key == pygame.K\_w and y2\_change == 0:  
 y2\_change = -snake\_block  
 x2\_change = 0  
 elif event.key == pygame.K\_s and y2\_change == 0:  
 y2\_change = snake\_block  
 x2\_change = 0  
  
 # Проверка выхода за границы  
 if x1 >= dis\_width or x1 < 0 or y1 >= dis\_height or y1 < 0:  
 game\_close = True  
 if x2 >= dis\_width or x2 < 0 or y2 >= dis\_height or y2 < 0:  
 game\_close = True  
  
 # Обновление положения змей  
 x1 += x1\_change  
 y1 += y1\_change  
 x2 += x2\_change  
 y2 += y2\_change  
  
 dis.fill(blue)  
 pygame.draw.rect(dis, green, [foodx, foody, snake\_block, snake\_block])  
  
 snake\_Head1 = []  
 snake\_Head1.append(x1)  
 snake\_Head1.append(y1)  
 snake\_List1.append(snake\_Head1)  
  
 snake\_Head2 = []  
 snake\_Head2.append(x2)  
 snake\_Head2.append(y2)  
 snake\_List2.append(snake\_Head2)  
  
 if len(snake\_List1) > Length\_of\_snake1:  
 del snake\_List1[0]  
 if len(snake\_List2) > Length\_of\_snake2:  
 del snake\_List2[0]  
  
 # Проверка на столкновение со змеями  
 for x in snake\_List1[:-1]:  
 if x == snake\_Head1:  
 game\_close = True  
  
 for x in snake\_List2[:-1]:  
 if x == snake\_Head2:  
 game\_close = True  
  
 our\_snake(snake\_block, snake\_List1)  
 our\_snake(snake\_block, snake\_List2)  
  
 Your\_score(Length\_of\_snake1 - 1, Length\_of\_snake2 - 1)  
 pygame.display.update()  
  
 # Проверка на поедание еды  
 if x1 == foodx and y1 == foody:  
 foodx = round(random.randrange(0, dis\_width - snake\_block) / 10.0) \* 10.0  
 foody = round(random.randrange(0, dis\_height - snake\_block) / 10.0) \* 10.0  
 Length\_of\_snake1 += 1  
  
 if x2 == foodx and y2 == foody:  
 foodx = round(random.randrange(0, dis\_width - snake\_block) / 10.0) \* 10.0  
 foody = round(random.randrange(0, dis\_height - snake\_block) / 10.0) \* 10.0  
 Length\_of\_snake2 += 1  
  
 clock.tick(snake\_speed)  
  
 pygame.quit()  
 quit()  
  
 # Запуск игры  
gameLoop()