import pygame

import random

# Initialize Pygame

pygame.init()

# Set screen dimensions

screen\_width = 600

screen\_height = 400

screen = pygame.display.set\_mode((screen\_width, screen\_height))

# Colors

black = (0, 0, 0)

white = (255, 255, 255)

green = (0, 255, 0)

red = (255, 0, 0)

# Snake properties

snake\_block\_size = 10

snake\_speed = 15

# Clock for controlling frame rate

clock = pygame.time.Clock()

# Font for displaying score

font\_style = pygame.font.SysFont(None, 30)

'''def display\_score(score):

#Renders the score on the screen.

value = font\_style.render("Your Score: " + str(score), True, white)

screen.blit(value, [0, 0])'''

def draw\_snake(snake\_block\_size, snake\_list):

#Draws the snake on the screen.

for x, y in snake\_list:

pygame.draw.rect(screen, green, [x, y, snake\_block\_size, snake\_block\_size])

def message(msg, color):

#Displays a message on the screen.

mesg = font\_style.render(msg, True, color)

screen.blit(mesg, [screen\_width/6, screen\_height/3])

def game\_loop():

#The main game loop.

game\_over = False

game\_close = False

x1 = screen\_width / 2

y1 = screen\_height / 2

x1\_change = 0

y1\_change = 0

snake\_list = []

snake\_length = 1

# Food properties

foodx = round(random.randrange(0, screen\_width - snake\_block\_size) / 10.0) \* 10.0

foody = round(random.randrange(0, screen\_height - snake\_block\_size) / 10.0) \* 10.0

while not game\_over:

screen.fill(black)

while game\_close == True:

screen.fill(black)

message("You Lost! C-Play Again", red)

pygame.display.update()

for event in pygame.event.get():

if event.type == pygame.KEYDOWN:

if event.key == pygame.K\_q:

game\_over = True

if event.key == pygame.K\_c:

game\_loop()

game\_close = False

for event in pygame.event.get():

if event.type == pygame.QUIT:

game\_over = True

if event.type == pygame.KEYDOWN:

if event.key == pygame.K\_LEFT:

x1\_change = -snake\_block\_size

y1\_change = 0

elif event.key == pygame.K\_RIGHT:

x1\_change = snake\_block\_size

y1\_change = 0

elif event.key == pygame.K\_UP:

y1\_change = -snake\_block\_size

x1\_change = 0

elif event.key == pygame.K\_DOWN:

y1\_change = snake\_block\_size

x1\_change = 0

# Update snake's head position

x1 += x1\_change

y1 += y1\_change

# Check for collisions

if x1 >= screen\_width or x1 < 0 or y1 >= screen\_height or y1 < 0:

game\_close = True

for x in snake\_list[:-1]:

if x == [x1, y1]:

game\_close = True

# Add snake's head to the list

snake\_list.append([x1, y1])

# Check if the snake has eaten food

if len(snake\_list) > snake\_length:

del snake\_list[0]

# Draw the snake

draw\_snake(snake\_block\_size, snake\_list)

# Draw food

pygame.draw.rect(screen, red, [foodx, foody, snake\_block\_size, snake\_block\_size])

# Check if snake ate food

if x1 == foodx and y1 == foody:

foodx = round(random.randrange(0, screen\_width - snake\_block\_size) / 10.0) \* 10.0

foody = round(random.randrange(0, screen\_height - snake\_block\_size) / 10.0) \* 10.0

snake\_length += 1

# Update the display

pygame.display.update()

# Control the frame rate

clock.tick(snake\_speed)

# Quit Pygame

pygame.quit()

quit()

# Start the game

game\_loop()