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# Basic Pygame Structure

import pygame                               # Imports pygame and other libraries
import random

# Define Classes (sprites) here
class Balloon(pygame.sprite.Sprite):

    def __init__(self,x,y,direction,balloonType):
        pygame.sprite.Sprite.__init__(self)

        self.Direction = direction
        self.BalloonType = balloonType

        if balloonType == 1:
            balloonImage = pygame.image.load("RedBalloon.png")
            self.Speed = 3
            self.Score = 5
        if balloonType == 2:
            balloonImage = pygame.image.load("YellowBalloon.png")
            self.Speed = 7
            self.Score = 15
        if balloonType == 3:
            balloonImage = pygame.image.load("GreenBalloon.png")
            self.Speed = 5
            self.Score = 10
        if balloonType == 4:
            balloonImage = pygame.image.load("BlueBalloon.png")
            self.Speed = 10
            self.Score = 0

        self.image = pygame.Surface([26,50])
        self.image.set_colorkey(black)
        self.image.blit(balloonImage,(0,0))
        self.rect = self.image.get_rect()
        self.rect.x = x
        self.rect.y = y

    def moveBalloons(self):

        if self.Direction == "right":
            self.rect.x += self.Speed
        if self.Direction == "left":
            self.rect.x -= self.Speed

class Dart(pygame.sprite.Sprite):

    def __init__(self):
        pygame.sprite.Sprite.__init__(self)
        dartImage = pygame.image.load("Dart.png")
        self.image = pygame.Surface([24,19])
        self.image.set_colorkey(black)
        self.image.blit(dartImage,(0,0))
        self.rect = self.image.get_rect()
        self.rect.x = 388
        self.rect.y = 190

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58      def moveDart(self,mousePosition):
59          self.rect.x = mousePosition[0]
60          self.rect.y = mousePosition[1]
61
62  pygame.init()                               # Pygame is initialised (starts running)
63
64  screen = pygame.display.set_mode([800,400]) # Set the width and height of the screen [width,height]
65  pygame.display.set_caption("Balloon Burst")       # Name your window
66  background_image = pygame.image.load("SkyBackground.png").convert()
67  pygame.mouse.set_visible(False)
68  done = False                                # Loop until the user clicks the close button.
69  clock = pygame.time.Clock()                 # Used to manage how fast the screen updates
70  black    = (   0,   0,   0)                # Define some colors using rgb values.  These can be
71  white    = ( 255, 255, 255)                 # used throughout the game instead of using rgb values.
72  font = pygame.font.Font(None, 36)
73
74  popSound = pygame.mixer.Sound("pop.wav")
75
76  otherBalloons = pygame.sprite.Group()
77  blueBalloons = pygame.sprite.Group()
78  allBalloons = pygame.sprite.Group()
79
80  timeTillNextBalloon = random.randint(1000,2000)
81  mousePosition = [0]*2
82  score = 0
83
84  dart = Dart()
85  darts = pygame.sprite.Group()
86  darts.add(dart)
87
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88  # Define additional Functions and Procedures here
89
90  # -------- Main Program Loop -----------
91  while done == False:
92
93      for event in pygame.event.get():        # Check for an event (mouse click, key press)
94          if event.type == pygame.QUIT:       # If user clicked close window
95              done = True                     # Flag that we are done so we exit this loop
96
97          if event.type == pygame.MOUSEMOTION:
98              mousePosition[:] = list(event.pos)
99              dart.moveDart(mousePosition)
100
101         if event.type == pygame.MOUSEBUTTONDOWN and event.button == 1:
102             hitBalloons = pygame.sprite.groupcollide(blueBalloons,darts,False, False)
103             if len(hitBalloons) > 0:
104                 done = True
105             hitBalloons = pygame.sprite.groupcollide(otherBalloons,darts,False, False)
106             for balloon in (hitBalloons):
107                 score += balloon.Score
108                 popSound.play()
109             pygame.sprite.spritecollide(dart,allBalloons, True, collided = None)
110
111
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112     # Update sprites here
113     if pygame.time.get_ticks() > timeTillNextBalloon:
114         timeTillNextBalloon += random.randint(300,2500)
115         yCoord = random.randint(50,350)
116         balloonType = random.randint(1,4)
117         balloon = Balloon(0,yCoord,"right",balloonType)
118         if balloonType >=1 and balloonType <=3:
119             otherBalloons.add(balloon)
120         else:
121             blueBalloons.add(balloon)
122         allBalloons.add(balloon)
123 
124     # Check if balloon sprites have reached edge of screen
125     for balloon in (allBalloons.sprites()):
126         if balloon.rect.x < 0:
127             balloon.Direction = "right"
128         if balloon.rect.x > 774:
129             balloon.Direction = "left"
130 
131     # Move each balloon in the allBalloons group
132     for balloon in (allBalloons.sprites()):
133         balloon.moveBalloons()
134 
135     screen.blit(background_image, [0,0])
136     allBalloons.draw(screen)
137     darts.draw(screen)
138     # Add the score to the screen
139     textImg = font.render(str(score),1,white)
140     screen.blit( textImg, (10,10) )
141 
142     pygame.display.flip()                   # Go ahead and update the screen with what we've drawn.
143     clock.tick(20)                          # Limit to 20 frames per second
144 
145 pygame.quit()                               # Close the window and quit.
146 
147 
```