import pygame

from pygame.locals import \*

import math

import random

pygame.init()

width, height = 640, 480

screen=pygame.display.set\_mode((width, height))

pygame.display.set\_caption("game start")

keys = [False, False, False, False]

playerpos=[100,100]

#记录射出的箭头数，被击中的獾的数量

acc=[0,0]

#跟踪箭头

arrows=[]

#定义一个定时器，使得游戏里可以经过一段时间后就新建一只獾

badtimer=100

badtimer1=0

badguys=[[640,100]]

pygame.mixer.init()

player = pygame.image.load("resources/images/dude.png")

grass = pygame.image.load("resources/images/grass.png")

castle = pygame.image.load("resources/images/castle.png")

arrow = pygame.image.load("resources/imagesllet.png")

#加载獾图片

badguyimg1 = pygame.image.load("resources/resources/images/badguy.png")

badguyimg=badguyimg1

running = 1

exitcode = 0

while running:

badtimer-=1

screen.fill(0)

for x in range(int(width/grass.get\_width())+1):

for y in range(int(height/grass.get\_height())+1):

screen.blit(grass,(x\*100,y\*100))

screen.blit(castle,(0,30))

screen.blit(castle,(0,135))

screen.blit(castle,(0,240))

screen.blit(castle,(0,345 ))

#玩家旋转兔子

#获取鼠标的位置

position = pygame.mouse.get\_pos()

#通过atan2函数得出的弧度值

angle = math.atan2(position[1]-(playerpos[1]+32),position[0]-(playerpos[0]+26))

#使玩家转向

playerrot = pygame.transform.rotate(player, 360-angle\*57.29)

#确定玩家的位置

playerpos1 = (playerpos[0]-playerrot.get\_rect().width/2, playerpos[1]-playerrot.get\_rect().height/2)

#显示到屏幕上

screen.blit(playerrot, playerpos1)

#画出箭头

for bullet in arrows:

index=0

velx=math.cos(bullet[0])\*10#10是箭头的速度，单位移动的位移

vely=math.sin(bullet[0])\*10

bullet[1]+=velx#在玩家位置的基础上加入箭的位移

bullet[2]+=vely

if bullet[1]<-64 or bullet[1]>640 or bullet[2]<-64 or bullet[2]>480:

arrows.pop(index)

index+=1

#循环把箭头画出来

for projectile in arrows:

arrow1 = pygame.transform.rotate(arrow, 360-projectile[0]\*57.29)

screen.blit(arrow1, (projectile[1], projectile[2]))

#画出獾

#检查badtime是否为0，如果为0，创建一个獾并重设badtime

if badtimer==0:

#创建一个獾的初始位置

badguys.append([640, random.randint(50,430)])

#计时器不断减少

badtimer=100-(badtimer1\*2)

#控制减少的时间

if badtimer1>=35:

badtimer1=35

else:

badtimer1+=5

index=0

for badguy in badguys:

#獾进入城堡就消失

if badguy[0]<-64:

badguys.pop(index)

#獾不断向前进

badguy[0]-=7

index+=1

#循环显示所有獾

for badguy in badguys:

screen.blit(badguyimg, badguy)

pygame.display.flip()

for event in pygame.event.get():

if event.type == pygame.QUIT:

exit()

if event.type == pygame.KEYDOWN:

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

keys[0]=True

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

keys[1]=True

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

keys[2]=True

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

keys[3]=True

if event.type == pygame.KEYUP:

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

keys[0]=False

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

keys[1]=False

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

keys[2]=False

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

keys[3]=False

#玩家移动按键

if keys[0]:

playerpos[1]-=5

elif keys[2]:

playerpos[1]+=5

if keys[1]:

playerpos[0]-=5

elif keys[3]:

playerpos[0]+=5

#跟踪箭头

if event.type==pygame.MOUSEBUTTONDOWN:#检查是否点击了鼠标

position=pygame.mouse.get\_pos()#获取鼠标的位置

acc[1]+=1#箭头数加一

#向箭头的列表里加入箭头的选择角度，以及当前玩家的x,y坐标

arrows.append([math.atan2(position[1]-(playerpos1[1]+32),position[0]-(playerpos1[0]+26)),playerpos1[0]+32,playerpos1[1]+32])

while 1:

for event in pygame.event.get():

if event.type == pygame.QUIT:

pygame.quit()

exit(0)

pygame.display.flip()