ProExD / ex04 / dodge_bomb.py / <> Jump to ▼

```
c0b21009 final commit #10

At 1 contributor
```

```
128 lines (110 sloc) | 3.99 KB
  1
      from pygame.locals import *
  2
      import pygame as pg
  3
      import sys
      from random import randint
  4
  5
      import tkinter.messagebox as tkm
  6
      def gameover():
  7
          tkm.showwarning("あっ","はじけっちゃったwwww\n"+str(tmr)+"秒逃げたよ")
  8
      def check_bound(obj_rct, scr_rct):
  9
          obj_rct:こうかとんrct, または、爆弾rct
 10
          scr_rct:スクリーンrct
 11
 12
          領域内:+1/領域外:-1
 13
 14
          yoko, tate = +1, +1
          if obj_rct.left < scr_rct.left or scr_rct.right < obj_rct.right:</pre>
 15
              yoko = -1
 16
 17
          if obj_rct.top < scr_rct.top or scr_rct.bottom < obj_rct.bottom:</pre>
              tate = -1
 18
 19
          return yoko, tate
 20
 21
 22
      def main():
 23
          global tmr
 24
          # 練習1
 25
          pg.display.set_caption("逃げろ!こうかとん")
          scrn_sfc = pg.display.set_mode((1600, 900))
 26
 27
          scrn_rct = scrn_sfc.get_rect()
          bg_sfc = pg.image.load("fig/pg_bg.jpg")
 28
 29
          bg_rct = bg_sfc.get_rect()
 30
          # 練習3
 31
 32
          tori_sfc = pg.image.load("fig/6.png")
          tori_sfc = pg.transform.rotozoom(tori_sfc, 0, 2.0)
 33
 34
          tori_rct = tori_sfc.get_rect()
 35
          tori_rct.center = 900, 400
 36
 37
          # 練習5
          bomb_sfc = pg.Surface((20, 20)) # 空のSurface
```

```
bomb_sfc.set_colorkey((0, 0, 0)) # 四隅の黒い部分を透過させる
39
40
         pg.draw.circle(bomb_sfc, (255, 0, 0), (10, 10), 10) # 円を描く
41
         bomb_rct = bomb_sfc.get_rect()
42
         bomb_rct.centerx = randint(0, scrn_rct.width)
         bomb_rct.centery = randint(0, scrn_rct.height)
44
         # 練習6
         vx, vy = +1, +1
45
46
47
         bomb2_sfc = pg.Surface((20, 20)) # 空のSurface
         bomb2_sfc.set_colorkey((0, 0, 0)) # 四隅の黒い部分を透過させる
48
49
         pg.draw.circle(bomb2_sfc, (255, 0, 0), (10, 10), 10) # 円を描く
50
         bomb2_rct = bomb_sfc.get_rect()
51
         bomb2_rct.centerx = randint(0, scrn_rct.width)
52
         bomb2_rct.centery = randint(0, scrn_rct.height)
53
         vx2, vy2 = +2, +2
54
55
         clock = pg.time.Clock() # 練習1
56
         while True:
             scrn_sfc.blit(bg_sfc, bg_rct) # 練習2
57
58
59
             for event in pg.event.get(): # 練習2
60
                 if event.type == pg.QUIT:
                     return
61
                 if event.type == KEYDOWN:
62
63
                     if event.key == K_SPACE:
                          vx, vy = 0, 0
64
                          vx2, vy2 = 0, 0
65
                     if event.key == K_v:
66
                         n=1.2
67
68
                         vx *=n
                         vy *=n
69
                         vx2 *=n
70
                         vy2 *=n
71
72
73
                 if event.type == KEYUP:
74
                     if event.key == K_SPACE:
75
                          vx, vy = 1, 1
76
                          vx2, vy2 = 2, 2
77
78
             key_states = pg.key.get_pressed()
79
             if key_states[pg.K_UP]: tori_rct.centery -= 1
80
             if key_states[pg.K_DOWN]: tori_rct.centery += 1
81
             if key_states[pg.K_LEFT]: tori_rct.centerx -= 1
82
             if key_states[pg.K_RIGHT]: tori_rct.centerx += 1
83
             yoko, tate = check_bound(tori_rct, scrn_rct)
             if yoko == -1:
85
                 if key_states[pg.K_LEFT]:
86
                     tori_rct.centerx += 1
87
                 if key_states[pg.K_RIGHT]:
                     tori rct.centerx -= 1
88
89
             if tate == -1:
                 if key_states[pg.K_UP]:
91
                     tori_rct.centery += 1
92
                 if key_states[pg.K_DOWN]:
93
                     tori_rct.centery -= 1
94
             scrn_sfc.blit(tori_sfc, tori_rct) # 練習3
95
             yoko, tate = check_bound(bomb_rct, scrn_rct)
```

```
97
              vx *= yoko
 98
              vy *= tate
 99
              bomb_rct.move_ip(vx, vy) # 練習6
              scrn_sfc.blit(bomb_sfc, bomb_rct) # 練習5
100
101
102
              yoko, tate = check_bound(bomb2_rct, scrn_rct)
103
              vx2 *= yoko
104
              vy2 *= tate
105
106
              bomb2_rct.move_ip(vx2, vy2) # 練習6
              scrn_sfc.blit(bomb2_sfc, bomb2_rct) # 練習5
107
              tmr+=0.001
108
              if tori_rct.colliderect(bomb_rct):
109
                  gameover()
110
111
                  return
              if tori_rct.colliderect(bomb2_rct):
112
                  gameover()
113
114
                  return
115
116
              pg.display.update() #練習2
              clock.tick(1000)
117
118
119
120
121
122
123
      if __name__ == "__main__":
124
          pg.init() # 初期化
125
          tmr=0.0
126
          main() # ゲームの本体
127
          pg.quit() # 初期化の解除
128
          sys.exit()
```