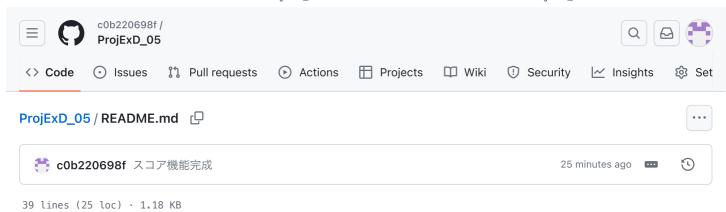
Raw 🗗 🕹 🖊 🕶 🗏



Preview



Code Blame

恐竜ゲーム

実行環境の必要条件 2

- python 3.10
- pygame >= 2.1

ゲームの概要 2

Googleの恐竜ゲームのpygame版です。ジャンプやしゃがみで障害物を避けるゲームです。

ゲームの実装 ∂

共通基本機能 🖉

- 恐竜が走る
- ジャンプする
- しゃがむ

担当追加機能 2

- スコアの追加 あゆき:恐竜が障害物に当たるまでスコアを加算する機能を実装した。
- 障害物の追加 たく
- 障害物の追加2 ゆりか
- 背景装飾 げんき
- サウンドの追加 ともこ

ToDo ∂

- □ ジャンプやしゃがみなどアクションを入れるたびにスコアを加算してもいいと思った。
- □ コメントアウトを増やしてもいいと思った。

メモ ②

• クラス内の変数は、わかりやすい名前にしてください.変数名の付け方はベースに合わせてください.

- 個人で実装したクラスにはコメントアウトをつけてどのような処理をしているのかがわかるようにしてください.
- pygameを使って作ってください.

```
2023/10/31 18:36
                                               ProjExD_05/dinosaur.py at C0B22069/score · c0b220698f/ProjExD_05
                c0b220698f /
                ProjExD_05
                            ?? Pull requests
               Issues
                                                Actions
                                                              Projects
                                                                            Wiki
                                                                                        Security
   <> Code

✓ Insights
                                                                                                                     🔯 Set

    C0B22069/score ▼

                                     ProjExD_05 / dinosaur.py
                                                                                       Q Go to file
     👫 c0b220698f スコア実装完了
                                                                                                 41 minutes ago
                                                                                                                      ٩
   161 lines (131 loc) · 4.27 KB
                                                                                              Raw [□ 🕹 | Ø 🕶
                                                                                                                     \langle \rangle
     Code
              Blame
         1
                import sys
         2
                import os
         3
                import random
         4
         5
                import pygame as pg
         6
         7
               SCREEN_HEIGHT = 600
         8
         9
               SCREEN_WIDTH = 1100
         10
               SCREEN = pg.display.set_mode((SCREEN_WIDTH, SCREEN_HEIGHT))
         11
         12
               RUNNING = [
                    pg.image.load(os.path.join("ex05/Assets/Dino", "DinoRun1.png")),
        13
        14
                    pg.image.load(os.path.join("ex05/Assets/Dino", "DinoRun2.png")),
        15
               JUMPING = pg.image.load(os.path.join("ex05/Assets/Dino", "DinoJump.png"))
        16
         17
               DUCKING = [
         18
                    pg.image.load(os.path.join("ex05/Assets/Dino", "DinoDuck1.png")),
                    pg.image.load(os.path.join("ex05/Assets/Dino", "DinoDuck2.png")),
        19
        20
                ]
        21
         22
         23
                BG = pg.image.load(os.path.join("ex05/Assets/Other", "Track.png"))
        24
        25
               class Dinosaur:
        26
                    X_POS = 80
        27
                    Y_POS = 310
        28
        29
                    Y_POS_DUCK = 340
                    JUMP_VEL = 8.5
        30
        31
        32 🗸
                    def __init__(self):
        33
                        self.duck_img = DUCKING
         34
                        self.run_img = RUNNING
        35
                        self.jump_img = JUMPING
        36
        37
                        self.dino_duck = False
                        self.dino_run = True
        38
        39
                        self.dino_jump = False
        40
        41
                        self.step_index = 0
                        self.jump_vel = self.JUMP_VEL
        42
                        self.image = self.run_img[0]
        43
        44
                        self.dino_rect = self.image.get_rect()
         45
                        self.dino_rect.x = self.X_POS
         46
                        self.dino_rect.y = self.Y_POS
        47
        48 🗸
                    def update(self, userInput):
```

```
49
                if self.dino_duck:
 50
                    self.duck()
 51
                if self.dino_run:
                    self.run()
 52
 53
                if self.dino_jump:
 54
                    self.jump()
 55
 56
                if self.step_index >= 10:
 57
                    self.step_index = 0
 58
 59
                if userInput[pg.K_UP] and not self.dino_jump:
 60
                    self.dino_duck = False
 61
                    self.dino_run = False
                    self.dino_jump = True
 62
 63
                elif userInput[pg.K_DOWN] and not self.dino_jump:
 64
                    self.dino_duck = True
                    self.dino_run = False
 65
                    self.dino_jump = False
 66
                elif not (self.dino_jump or userInput[pg.K_DOWN]):
 67
                    self.dino_duck = False
 68
 69
                    self.dino_run = True
 70
                    self.dino_jump = False
 71
 72 🗸
            def duck(self):
 73
                self.image = self.duck_img[self.step_index // 5]
 74
                self.dino_rect = self.image.get_rect()
 75
                self.dino_rect.x = self.X_POS
 76
                self.dino_rect.y = self.Y_POS_DUCK
 77
                self.step_index += 1
 78
 79 🗸
            def run(self):
                self.image = self.run_img[self.step_index // 5]
 80
 81
                self.dino_rect = self.image.get_rect()
 82
                self.dino_rect.x = self.X_POS
 83
                self.dino_rect.y = self.Y_POS
                self.step_index += 1
 84
 85
 86 🗸
            def jump(self):
 87
                self.image = self.jump_img
 88
                if self.dino_jump:
 89
                    self.dino_rect.y -= self.jump_vel * 4
 90
                    self.jump_vel -= 0.8
 91
                if self.jump_vel < -self.JUMP_VEL:</pre>
 92
                    self.dino_jump = False
 93
                    self.jump_vel = self.JUMP_VEL
 94
 95
            def draw(self, SCREEN):
 96
                SCREEN.blit(self.image, (self.dino_rect.x, self.dino_rect.y))
 97
 98
99 v def main():
100
            global game_speed, x_pos_bg, y_pos_bg, points, obstacles
101
            run = True
102
            clock = pg.time.Clock()
103
            player = Dinosaur()
104
            game\_speed = 20
105
            x_pos_bg = 0
106
            y_pos_bg = 380
107
            points = 0
108
            font = pg.font.Font("freesansbold.ttf", 20)
109
            obstacles = []
            pg.display.set_caption("恐竜ゲーム")
110
111
112 🗸
            def score():
113
                nlohal noints. dame sneed
```

```
ground points, game_spe
114
                points += 0.1
115
                if points % 100 == 0:
116
                    game\_speed += 1
117
118
                text = font.render(f"ScorePoint:{points:.0f}", True, (0, 0, 0))
                textRect = text.get_rect()
119
120
                textRect.center = (1000, 40)
                SCREEN.blit(text, textRect)
121
122
123 🗸
            def background():
124
                global x_pos_bg, y_pos_bg
125
                image_width = BG.get_width()
                SCREEN.blit(BG, (x_pos_bg, y_pos_bg))
126
127
                SCREEN.blit(BG, (image_width + x_pos_bg, y_pos_bg))
128
                if x_pos_bg <= -image_width:</pre>
129
                    SCREEN.blit(BG, (image_width + x_pos_bg, y_pos_bg))
130
                    x_pos_bg = 0
131
                x_pos_bg = game_speed
132
            while run:
133
134
               for event in pg.event.get():
135
                    if event.type == pg.QUIT:
136
                        run = False
137
                        sys.exit()
138
                SCREEN.fill((255, 255, 255))
139
140
                userInput = pg.key.get_pressed()
141
                player.draw(SCREEN)
142
143
                player.update(userInput)
144
145
                for obstacle in obstacles:
                    obstacle.draw(SCREEN)
146
147
                    obstacle.update()
148
                    if player.dino_rect.colliderect(obstacle.rect):
149
                        pg.time.delay(2000)
150
151
                background()
152
                score()
153
                clock.tick(30)
154
                pg.display.update()
155
156
157
        if __name__ == "__main__":
            pg.init()
158
159
            main()
160
            pg.quit()
161
            sys.exit()
```