

```
1 import pygame
2 pygame.init()
3 import time
4 import random
5
6 ##### Variáveis Globais #####
7 display_width = 800
8 display_height = 600
9 gameDisplay=pygame.display.set_mode((display_width,display_height))
10 clock = pygame.time.Clock()
11
12 black = (0,0,0)
13 white = (255,255,255)
14
15 ironManImg = pygame.image.load('assets/ironLarge.png')
16 missile = pygame.image.load('assets/missile.png')
17
18 gameIcon = pygame.image.load('assets/ironIcon.png')
19 pygame.display.set_icon(gameIcon)
20 pygame.display.set_caption('Iron Man - Marcão')
21
22 bg = pygame.image.load("assets/sky.png")
23 explosaoSound = pygame.mixer.Sound("assets/explosao.wav")
24 missileSound = pygame.mixer.Sound("assets/missile.wav")
25
26
27 ##### Funções Controladoras #####
28 def mostraIron(x,y):
29     gameDisplay.blit(ironManImg, (x,y))
30
31 def text_objects(text, font):
32     textSurface = font.render(text, True, black)
33     return textSurface, textSurface.get_rect()
34
35 def message_display(text):
36     largeText = pygame.font.Font('freesansbold.ttf',115)
37     TextSurf, TextRect = text_objects(text, largeText)
38     TextRect.center = ((display_width/2),(display_height/2))
39     gameDisplay.blit(TextSurf, TextRect)
40     pygame.display.update()
41     time.sleep(2)
42     game_loop()
43
44 def dead():
45     pygame.mixer.Sound.play(explosaoSound)
46     pygame.mixer.music.stop()
47     message_display('Você Morreu')
48
49 def mostraArmas(posicaoX, posicaoY):
50     gameDisplay.blit(missile,(posicaoX, posicaoY))
51
52 def escrevendoPlacar(count):
53     font = pygame.font.SysFont(None, 25)
54     text = font.render("Desvios: "+str(count), True, black)
55     gameDisplay.blit(text,(0,0))
56
57
58 ##### Looping do Jogo #####
```

```
59 def game_loop():
60     pygame.mixer.music.load('assets/ironsound.mp3')
61     pygame.mixer.music.play(-1)
62
63     ironPosicaoX = (display_width * 0.45)
64     ironPosicaoY = (display_height * 0.8)
65     iron_width = 120
66     movimentoX = 0
67     missileX = random.randrange(0, display_width)
68     missileY = -600
69     missileHeight = 250
70     missileWidht = 50
71     missileXSpped = 7
72     desvios = 0
73     while True:
74         for event in pygame.event.get():
75             if event.type == pygame.QUIT:
76                 pygame.quit()
77                 quit()
78
79             if event.type == pygame.KEYDOWN:
80                 if event.key == pygame.K_LEFT:
81                     movimentoX = -5
82                 elif event.key == pygame.K_RIGHT:
83                     movimentoX = 5
84             if event.type == pygame.KEYUP:
85                 if event.key == pygame.K_LEFT or event.key == pygame.K_RIGHT:
86                     movimentoX = 0
87             ironPosicaoX += movimentoX
88
89             if ironPosicaoX > display_width - iron_width or ironPosicaoX < 0:
90                 #quit()
91                 dead()
92
93             gameDisplay.fill(white)
94             gameDisplay.blit(bg, (0,0))
95             mostraIron(ironPosicaoX, ironPosicaoY)
96             escrevendoPlacar(desvios)
97
98             mostraArmas(missileX, missileY)
99             missileY += missileXSpped
100
101             if missileY > display_height:
102                 pygame.mixer.Sound.play(missileSound)
103                 missileY = 0 - missileHeight
104                 missileX = random.randrange(0, display_width)
105                 missileXSpped+=1
106                 desvios += 1
107
108
109             if ironPosicaoY < missileY + missileHeight:
110                 #print("Analisando Colisão")
111                 #print(ironPosicaoX, ironPosicaoX+iron_width)
112                 #print(missileX, missileX+missileWidht)
113                 if ironPosicaoX < missileX and ironPosicaoX+iron_width > missileX or
missileX+missileWidht > ironPosicaoX and missileX+missileWidht <
ironPosicaoX+iron_width:
114                     dead()
115
```

```
116 |
117 |     pygame.display.update()
118 |     clock.tick(60)
119 |
120 |
121 | game_loop()
```