AUX 01: PYGLETVERSE



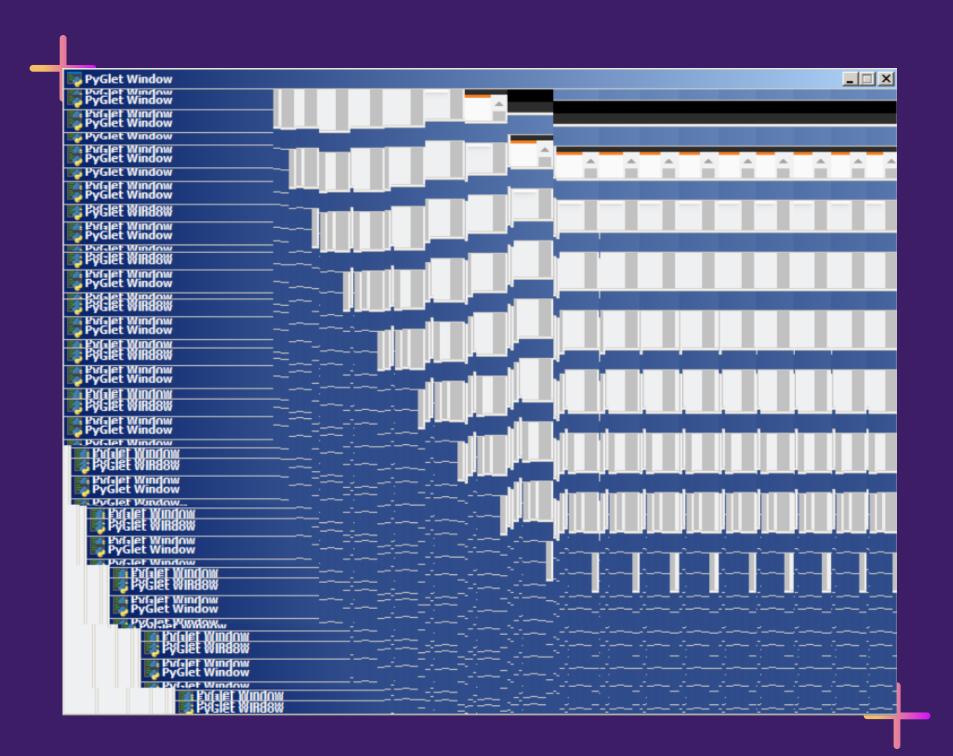
Que es pyglet?

"pyglet is a cross-platform windowing and multimedia library for Python, intended for developing games and other visually rich applications. It supports windowing, user interface event handling, game controllers and joysticks, OpenGL graphics, loading images and videos, and playing sounds and music. pyglet works on Windows, OS X and Linux."



Como funciona pyglet?

- Ventana(s)
- Eventos
 - Teclado
 - Mouse
- Figuras
- Imagenes
- Texto



Ventanas!

```
from pyglet.window import Window
     from pyglet.app import run
     WIDTH = 1000
     HEIGHT = 700
     WINDOW_TITLE = 'auxiliar 1! ๕ "^ ~ ^" ง'
     FULL_SCREEN = False
     ventana = Window(WIDTH, HEIGHT, WINDOW_TITLE, resizable=True)
10
     ventana.set_fullscreen(FULL_SCREEN)
12
     run()
13
```

Eventos

```
def enter_fullscreen(symbol, modifiers):
11
         if symbol == key.ENTER:
12
             ventana.set_fullscreen(not ventana._fullscreen)
13
     ventana.on_key_press = enter_fullscreen
14
15
16
     @ventana.event
     def on_key_release(symbol, modifiers):
17
         if symbol == key.SPACE:
18
             ventana.set_fullscreen(not ventana._fullscreen)
19
```

Eventos

```
def update_circle(x, y, dx, dy):
    circle.x, circle.y = x, y
    window.on_mouse_motion = update_circle
```

```
def on_mouse_press(x, y, button, modifiers):
    if button == mouse.LEFT:
        circle.x, circle.y = x, y
```

Figuras

```
circle = Circle(x=window.width//2, y=window.height//2, radius=100, color=(20, 225, 30))

def on_draw():
    window.clear()
    circle.draw()
```

```
circle = shapes.Circle(700, 150, 100, color=(50, 225, 30), batch=batch)
square = shapes.Rectangle(200, 200, 200, 200, color=(55, 55, 255), batch=batch)
rectangle = shapes.Rectangle(250, 300, 400, 200, color=(255, 22, 20), batch=batch)
rectangle.opacity = 128
rectangle.rotation = 33
line = shapes.Line(100, 100, 100, 200, width=19, batch=batch)
line2 = shapes.Line(150, 150, 444, 111, width=4, color=(200, 20, 20), batch=batch)
star = shapes.Star(800, 400, 60, 40, num_spikes=20, color=(255, 255, 0), batch=batch)
```

Figuras

```
12
     auto = Batch()
     rueda0 = Circle(x=1.5*ventana.width//2, y=0.75*ventana.height//2, radius=70, color=(200, 200, 30), batch=auto)
13
14
     rueda1 = Circle(x=0.75*ventana.width//2, y=0.75*ventana.height//2, radius=70, color=(200, 200, 30), batch=auto)
     chasis = Rectangle(x=ventana.width//4, y=4*ventana.height//9, width=2*ventana.width//3,
15
                        height=ventana.height//3, color=(20, 200, 20), batch=auto)
16
17
     @ventana.event
18
     def on draw():
19
         auto.draw()
20
```

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Imágenes

```
kitten = pyglet.image.load('kitten.png')
```

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Texto

```
window = pyglet.window.Window()
label = pyglet.text.Label('Hello, world',
                          font_name='Times New Roman',
                          font_size=36,
                          x=window.width//2, y=window.height//2,
                          anchor_x='center', anchor_y='center')
@window.event
def on_draw():
    window.clear()
    label.draw()
pyglet.app.run()
```

MODELACION Y COMPUTACIÓN ETC ETC ETC....

EJEMPLOS