

# Programação com a linguagem Céu

Por que usar Céu

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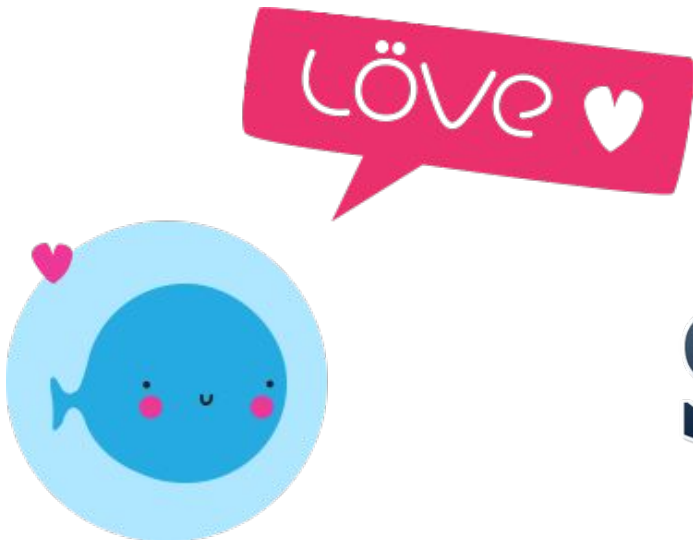
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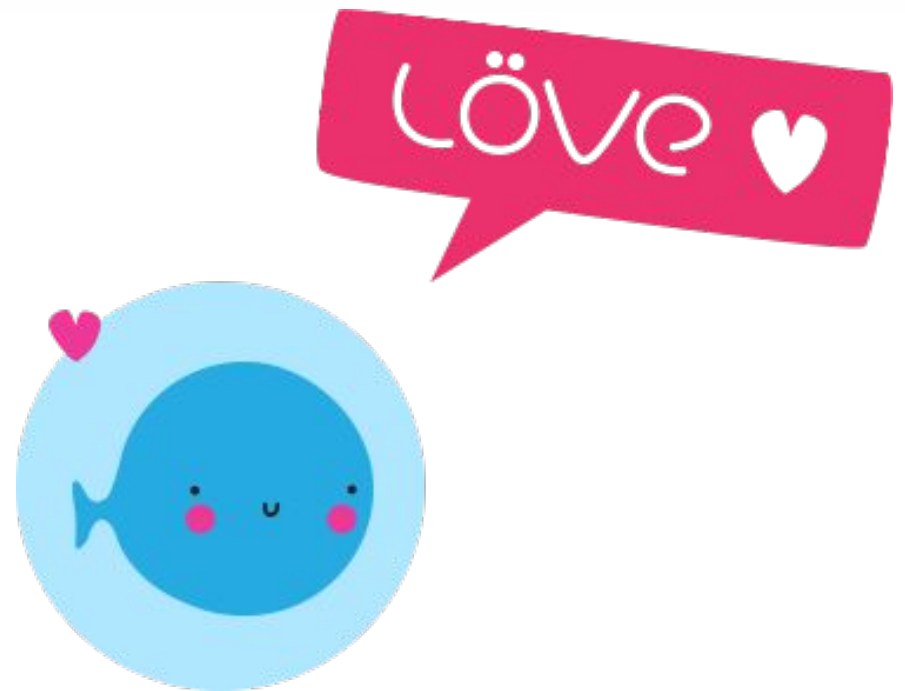
# Alternativas

- Unity
- SDL
  - Love2d
  - PyGame
- PixiJS



# Love2d

- framework em Lua
- voltado para jogos em 2D



# Um programa em Love2d

```
function love.load()
```

```
end
```

```
function love.keypressed(key)
```

```
end
```

```
function love.update(dt)
```

```
end
```

```
function love.draw()
```

```
end
```

# Usando um Callback

```
function love.keypressed(key)
  if key == "escape" then
    love.event.quit()
  end
end
```

# Verificando tecla no Update

```
function love.update(dt)
    if love.keyboard.isDown("escape") then
        love.event.quit()
    end
end
```

# Piscar um “pixel” em Love2d

- Piscar um “pixel”
  - pixel que muda de cor de 1 em 1 segundo
- Para de piscar quando houver um clique do mouse
- Primeiramente, vamos piscar um “pixel” em Love2d

```
function love.load()  
    red = {1, 0, 0}  
    yellow = {1, 1, 0}  
  
    color = red  
end
```

```
function love.draw()  
    love.graphics.setColor(color)  
    love.graphics.rectangle('fill', 200, 200, 20, 20)  
end
```

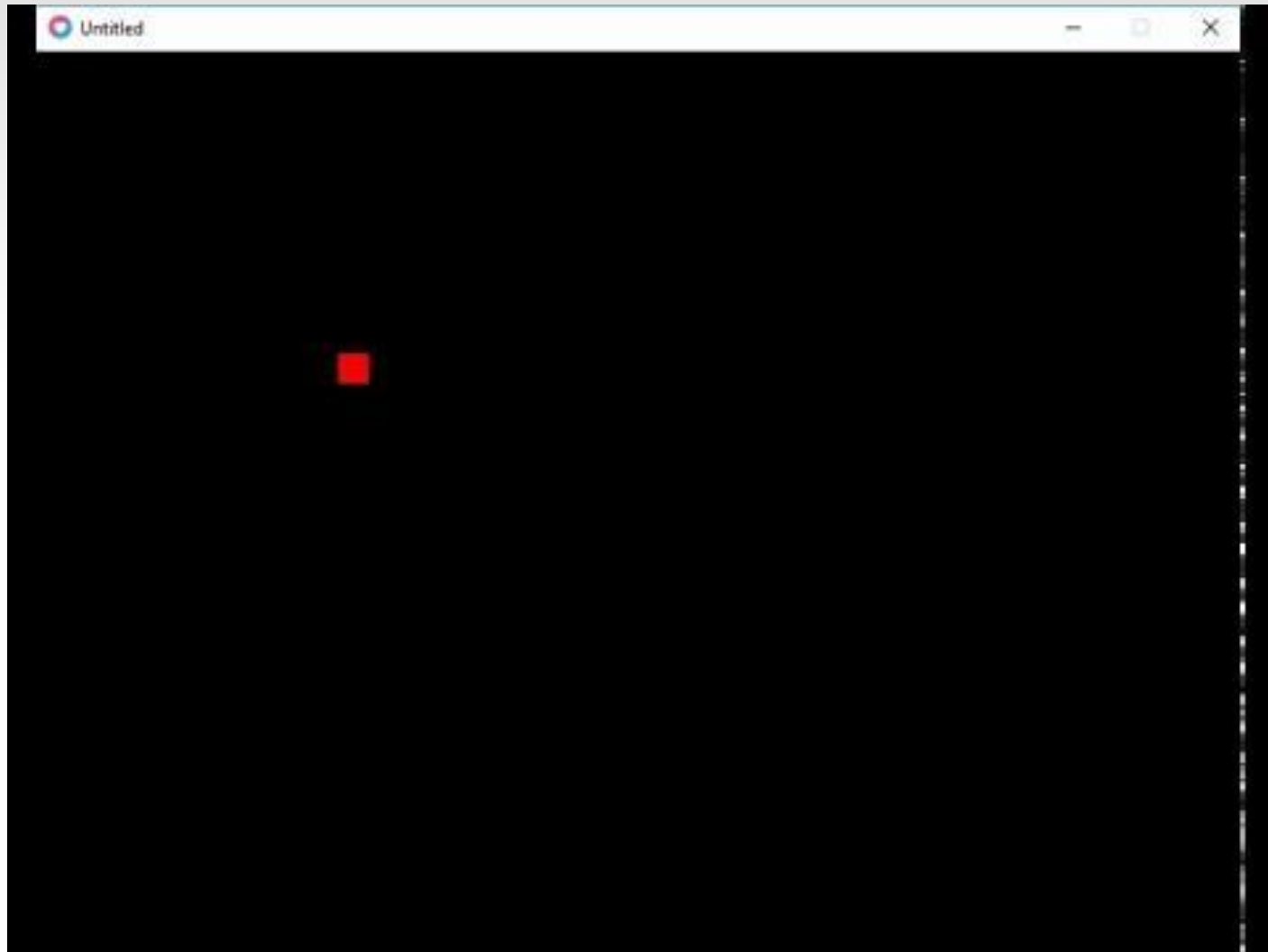


```
function love.load()  
    red = {1, 0, 0}  
    yellow = {1, 1, 0}  
  
    color = red  
  
    time_counter = 0  
  
end
```

```
function love.update(dt)  
    time_counter = time_counter + dt  
    if time_counter > 1 then  
        if color == red then  
            color = yellow  
        else  
            color = red  
        end  
        time_counter = 0  
    end  
end
```

```
function love.draw()  
    love.graphics.setColor(color)  
    love.graphics.rectangle('fill', 200, 200, 20, 20)  
  
end
```

# Piscar um “pixel” em Love2d



# Aguardar um clique do Mouse

- Quando clicar com o mouse
  - Parar de piscar o “pixel”

# Aguardando o clique do Mouse

```
function love.load()
```

```
    canBlink = true
```

```
    red = {1, 0, 0}
```

```
    yellow = {1, 1, 0}
```

```
    color = red
```

```
    time_counter = 0
```

```
end
```

love2d/blink.love/main.lua

```
function love.mousepressed()
```

```
    canBlink = false
```

```
end
```

love2d/blink.love/main.lua

# Aguardando o clique do Mouse

```
function love.load()
```

```
    canBlink = true
```

```
    red = {1, 0, 0}
```

```
    yellow = {1, 1, 0}
```

```
    color = red
```

```
    time_counter = 0
```

```
end
```

love2d/blink.love/main.lua

```
function love.update(dt)
```

```
    if (canBlink) then
```

```
        -- muda a cor em função
```

```
        -- do time_counter
```

```
    end
```

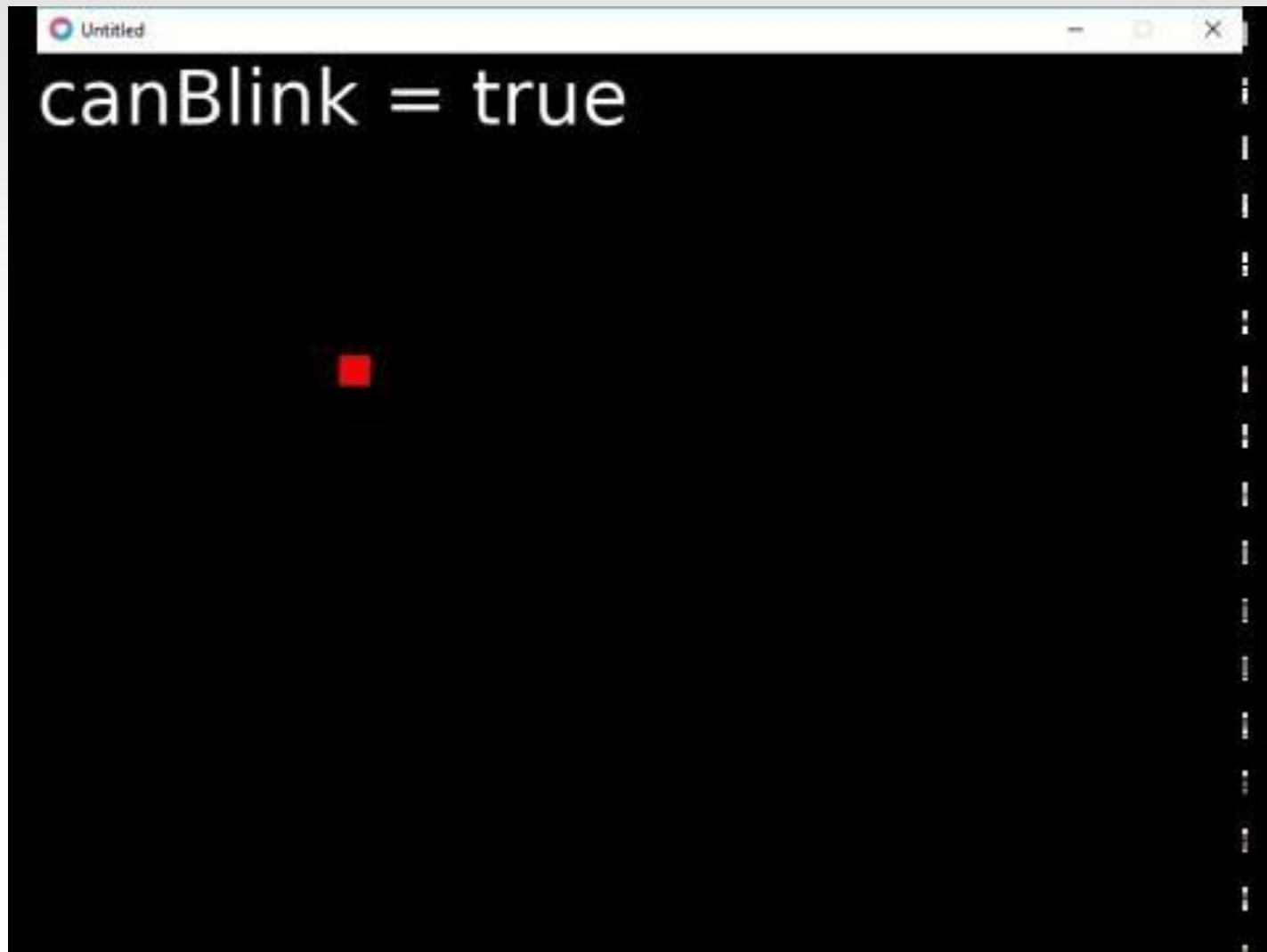
```
end
```

love2d/blink.love/main.lua

# Aguardando o clique do Mouse

```
function love.update(dt)
    if (canBlink) then
        time_counter = time_counter + dt
        if time_counter > 1 then
            if color == red then
                color = yellow
            else
                color = red
            end
            time_counter = 0
        end
    end
end
```

# Aguardar um clique do Mouse



# Em pico-Céu

```
par/or do
  loop do
    emit GRAPHICS_SET_COLOR_NAME(COLOR_RED);
    emit GRAPHICS_DRAW_PIXEL(0,0);
    await 1s;

    emit GRAPHICS_SET_COLOR_NAME(COLOR_YELLOW);
    emit GRAPHICS_DRAW_PIXEL(0,0);
    await 1s;
  end
with
  await MOUSE_CLICK;
end
```