

# SpriteKit

by Justin Shacklette

# What is SpriteKit?

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- 2D game framework from Apple

**sprites**

**animation**

**emitters**

**particles**

**physics**

**actions**

**audio**

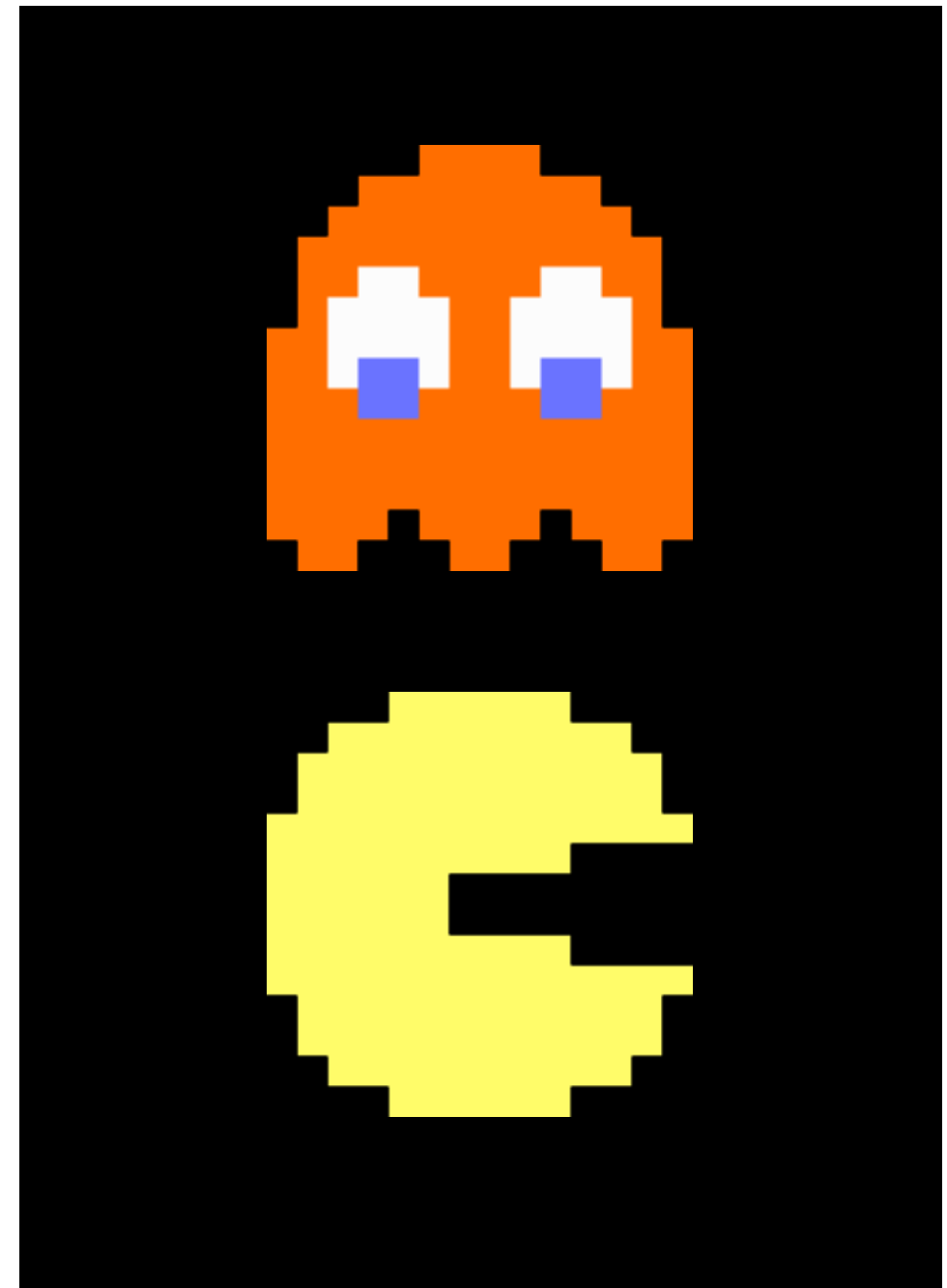
**events**

**gestures**

# Sprites

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- 2D bitmap images



# Sprite Anchor

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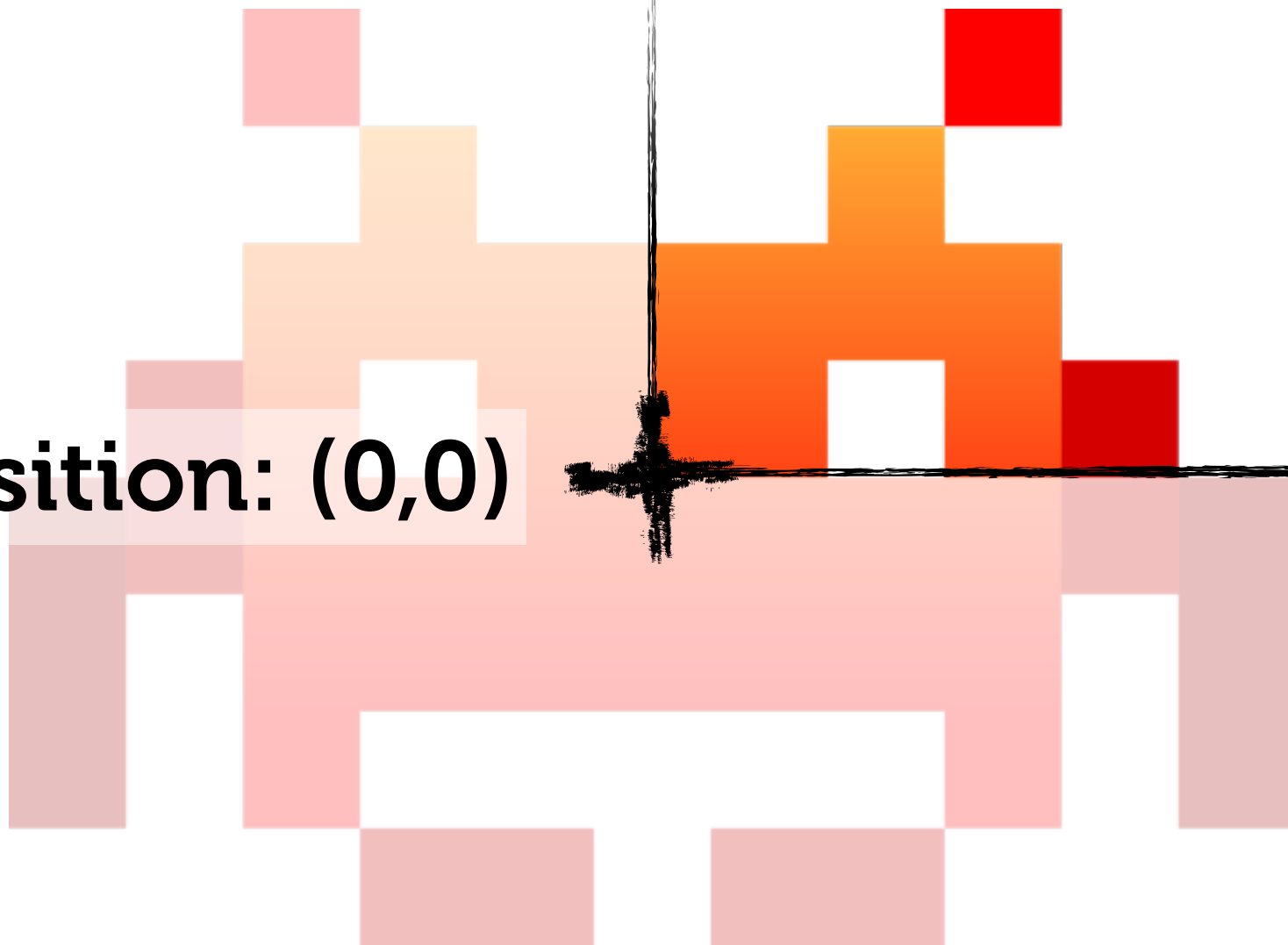
**anchor: (0.5,0.5)**



# Sprite Position

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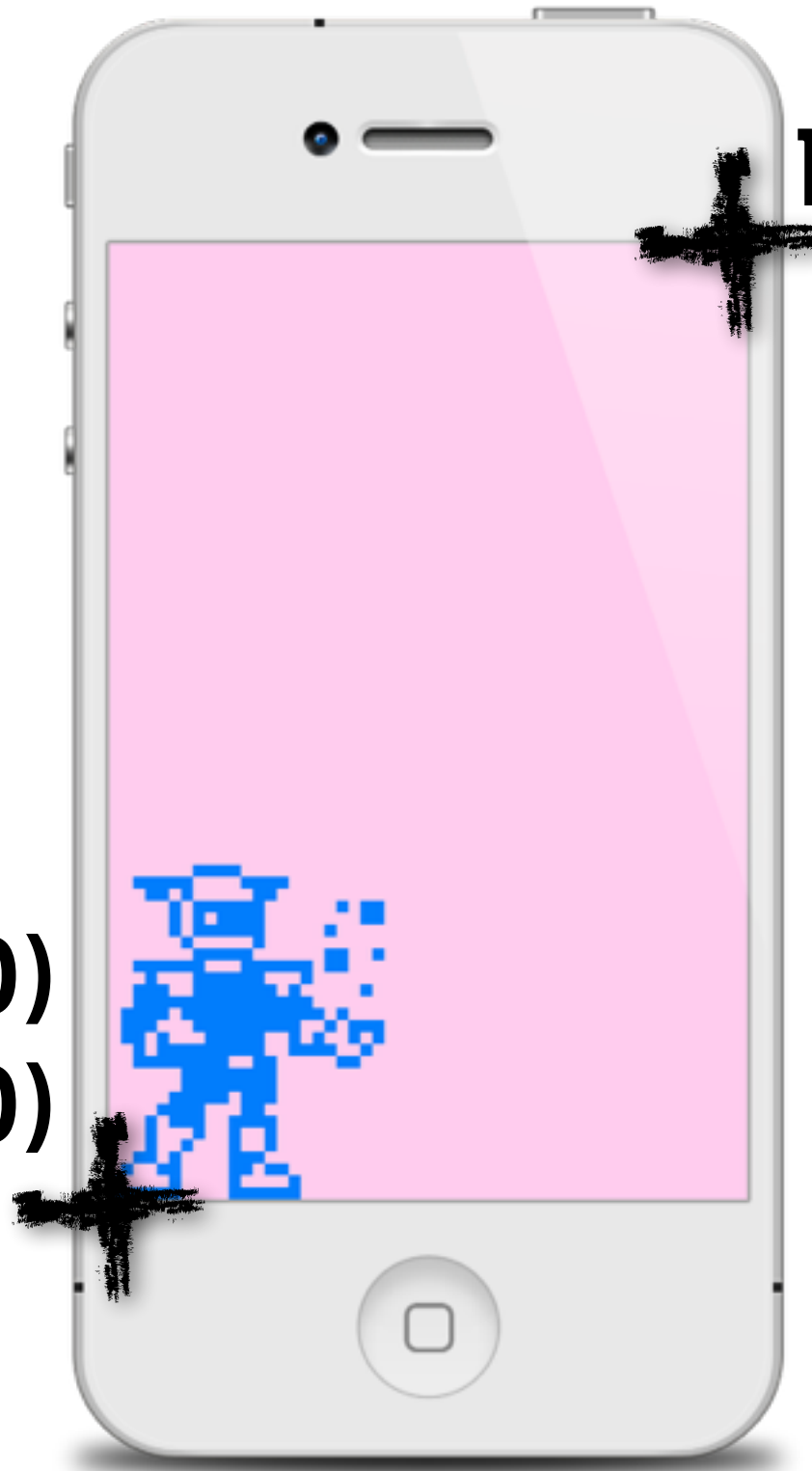
**position: (0,0)**



# Sprite Position

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**anchor: (0,0)**  
**position: (0,0)**



**position: (W,H)**

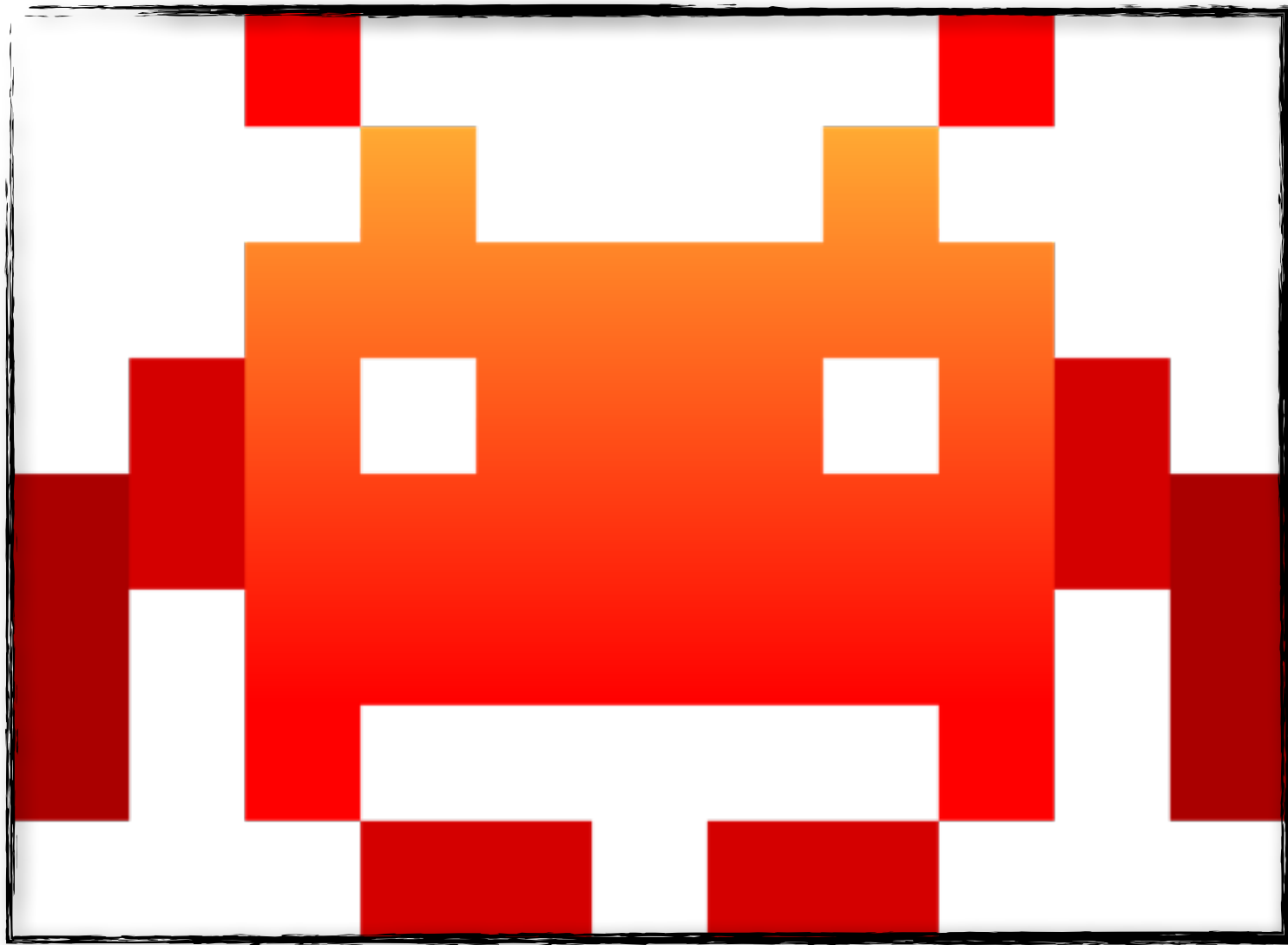
iPhone 4s  
320x480

iPhone 5s  
320x568

iPad Air  
768x1024

# Sprite Size

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**size: 44px × 32px**

# Sprite xScale, yScale

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**1.0**

44px × 32px



**2.0**

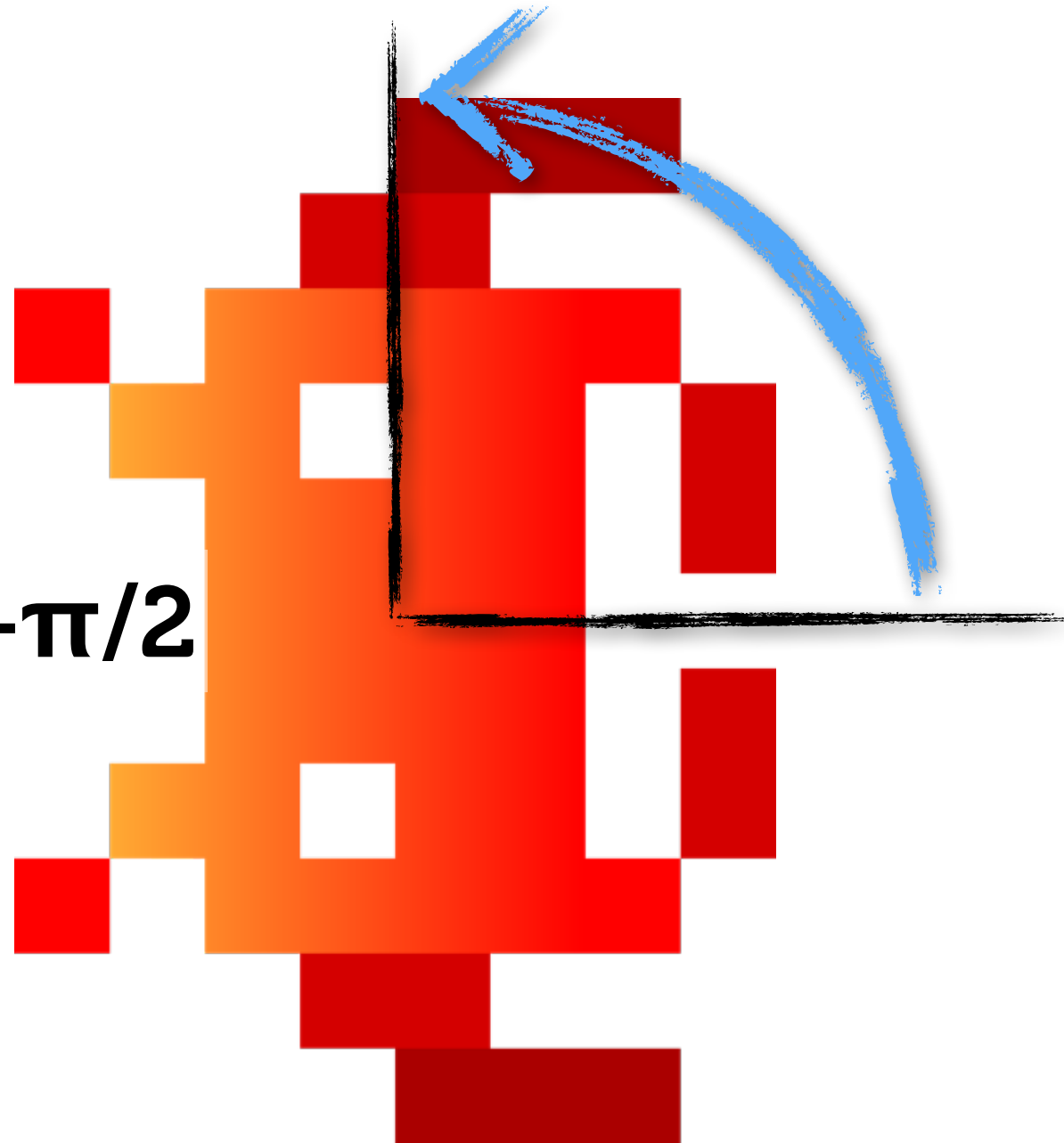
88px × 64px



# Sprite zRotation

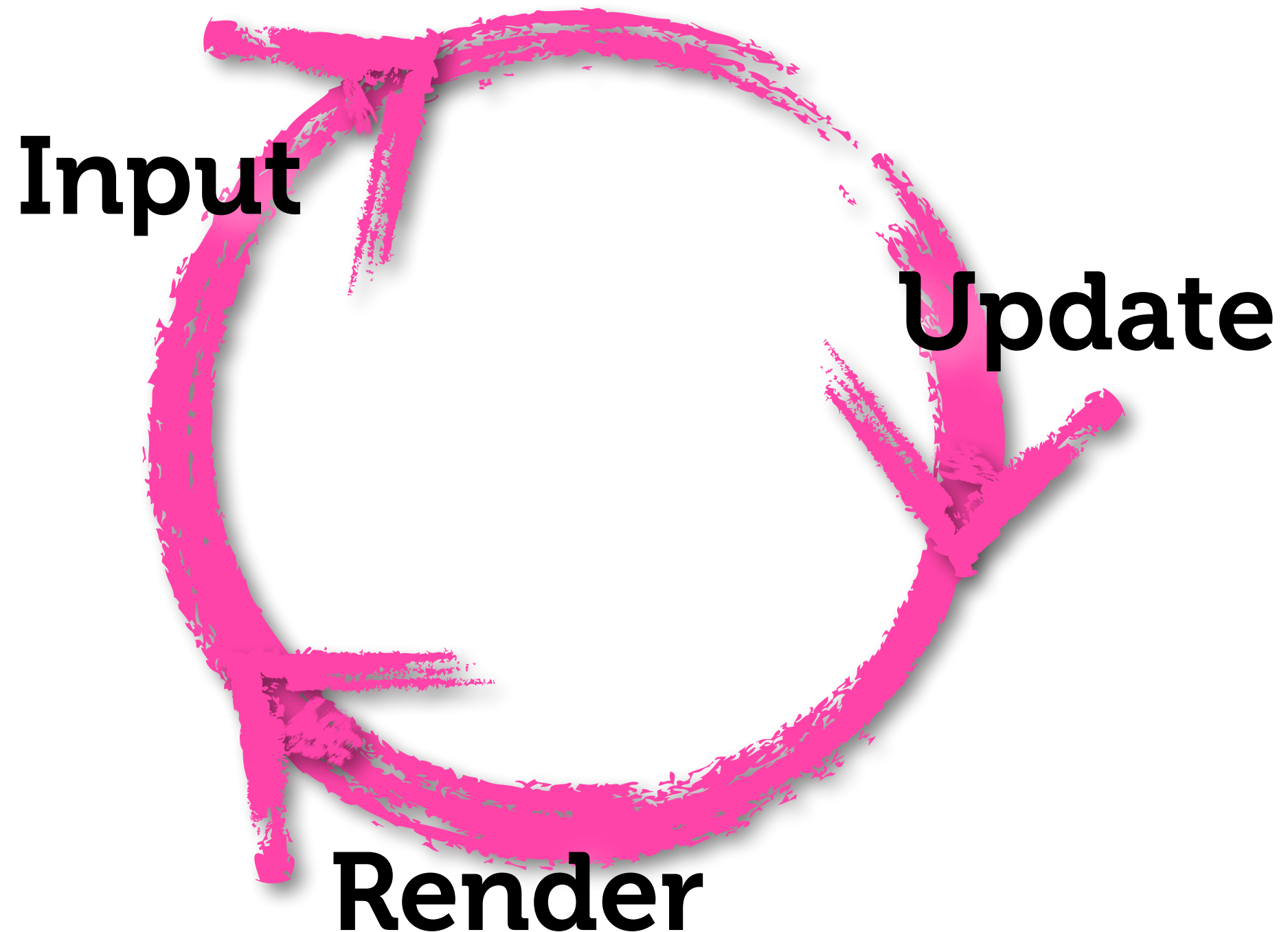
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**zRotation:  $+\pi/2$**



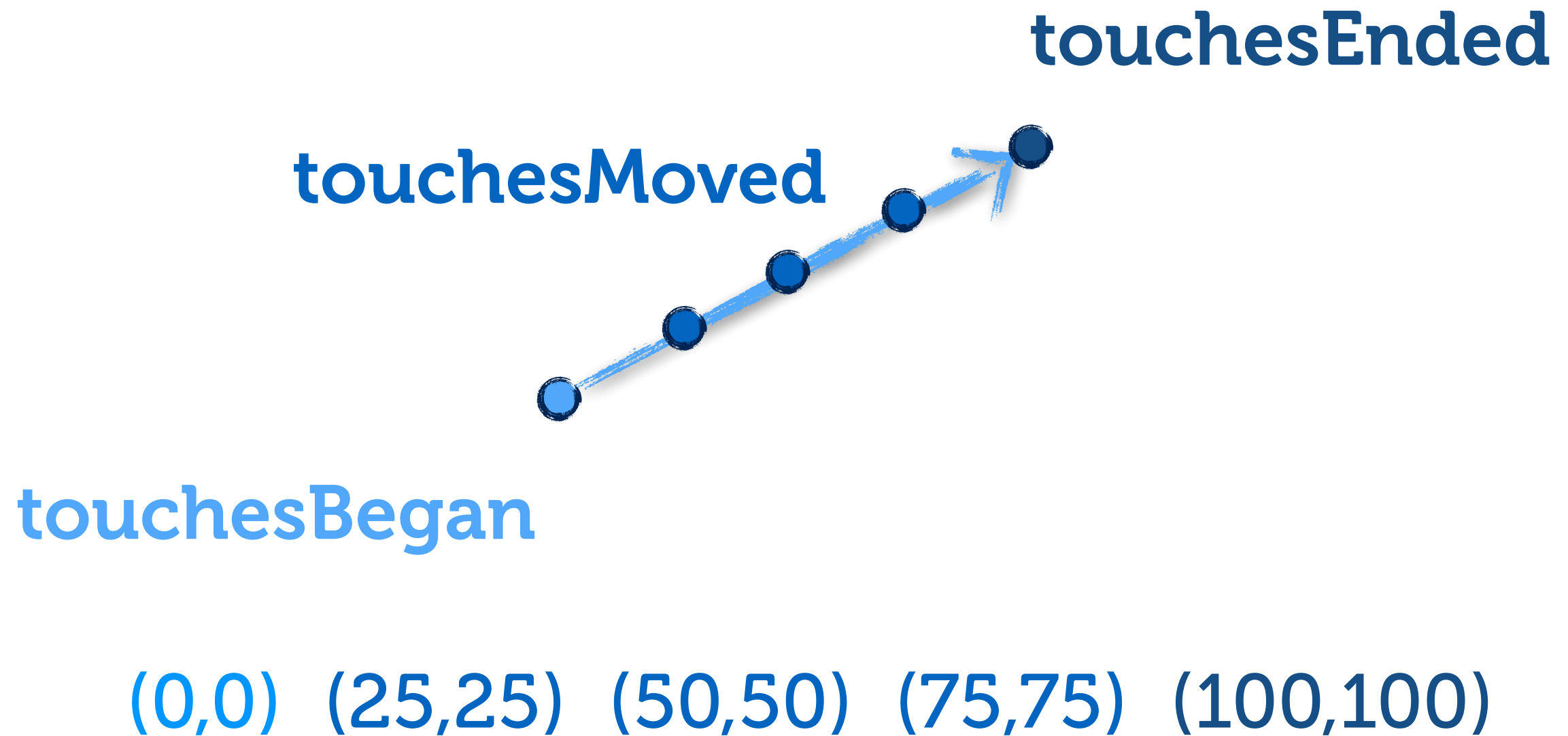
# The Game Loop

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# Touch Events

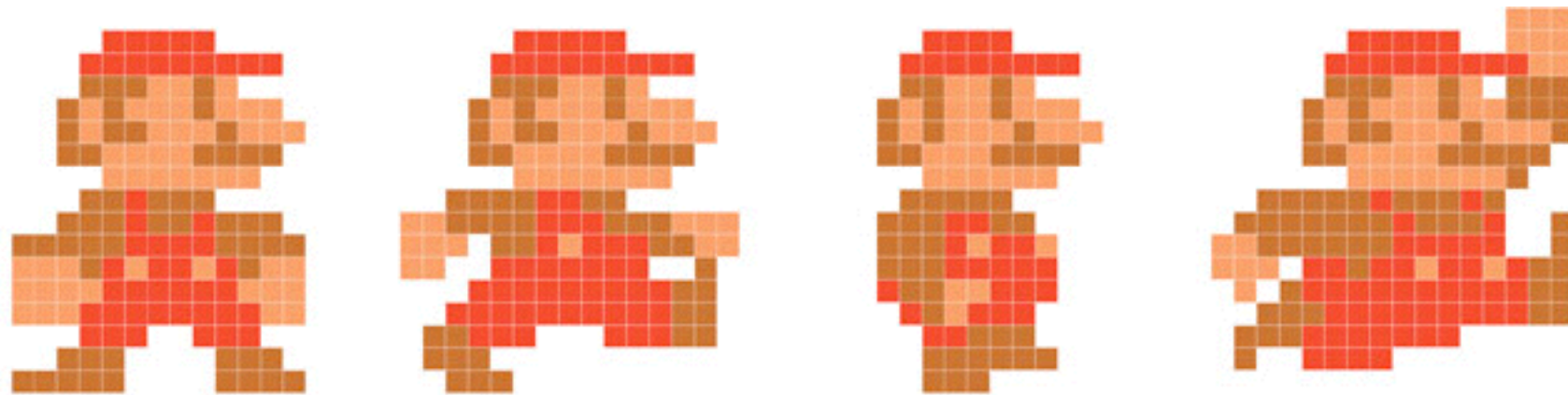
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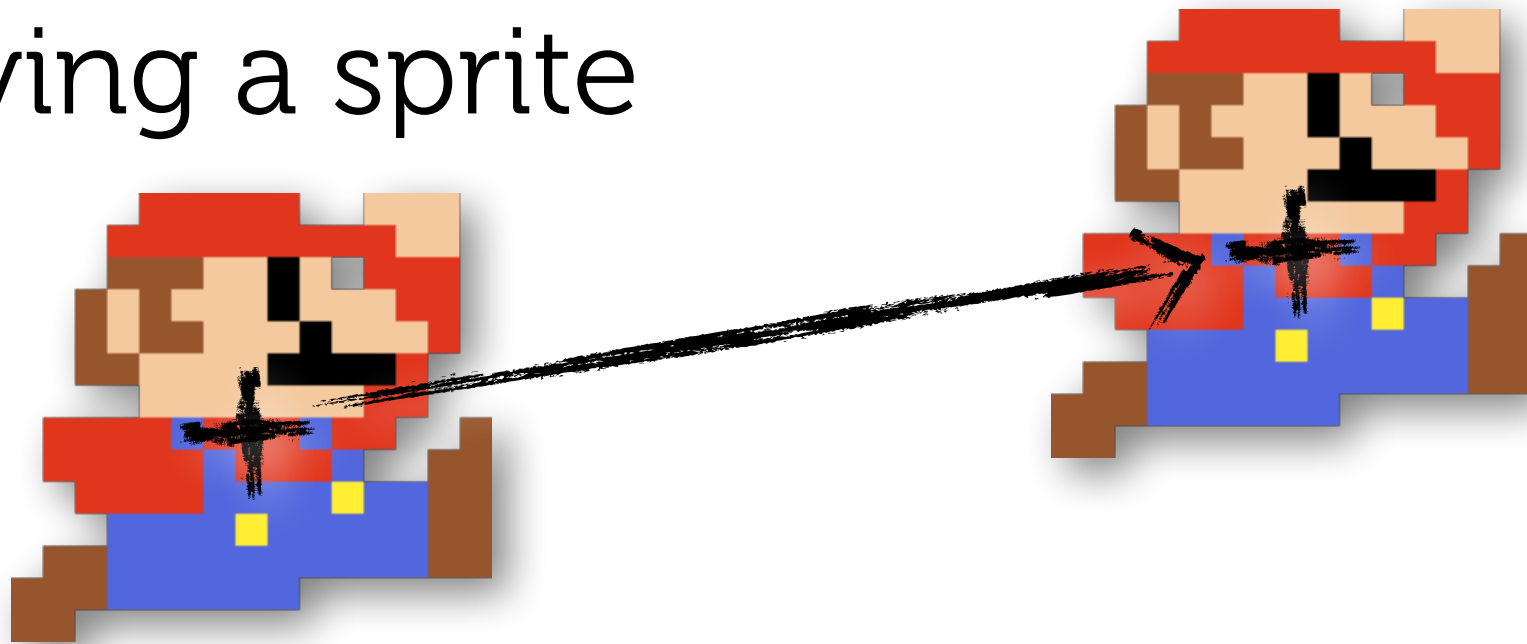
# Animation

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- Animating a sprite

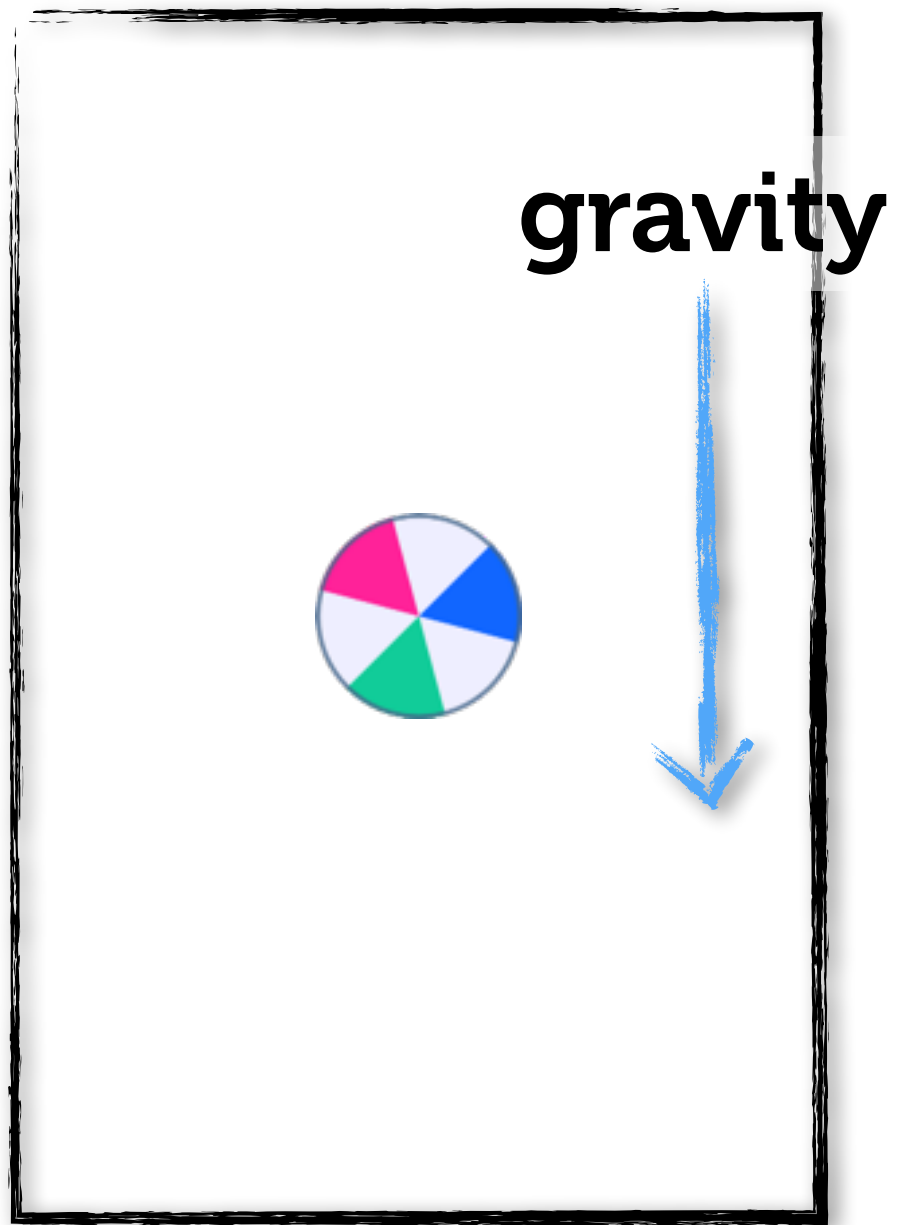


- Moving a sprite



# Physics

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**[github.com/saturnboy](https://github.com/saturnboy)**

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