SpriteKit Games

by Justin Shacklette

ACTIVISION

ACTIVISION FOUNDED IN

1979

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17 DOMESTIC
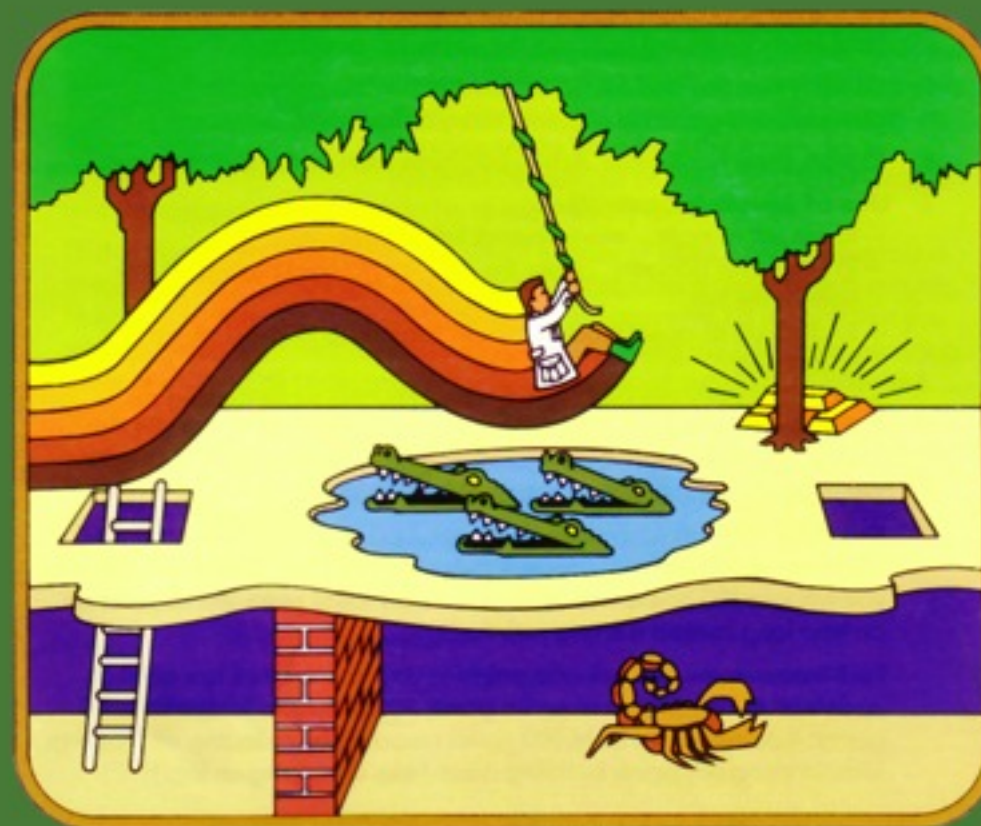LOCATIONS

21 INTERNATIONAL
LOCATIONS

ACTIVISION®
PRESENTS

PITFALL!™

VIDEO GAME CARTRIDGE

FOR USE WITH THE
ATARI VIDEO COMPUTER SYSTEM™

PS4
CALL OF DUTY
GHOSTS

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ESRB
infinity ward
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PS4
CALL OF DUTY
ADVANCED WARFARE

RP
ESRB
SLEDGEHAMMER
GAMES
ACTIVISION

PS4
CALL OF DUTY
BLACK OPS III

RP
ESRB
treyarch
ACTIVISION

Activision Game Science

- Make games better...through data
  - Catch cheaters
  - Balance weapons
  - Better matchmaking
  - Lots more...
- Maximize fun / minimize un-fun

http://activisiongamescience.github.io

What is SpriteKit?

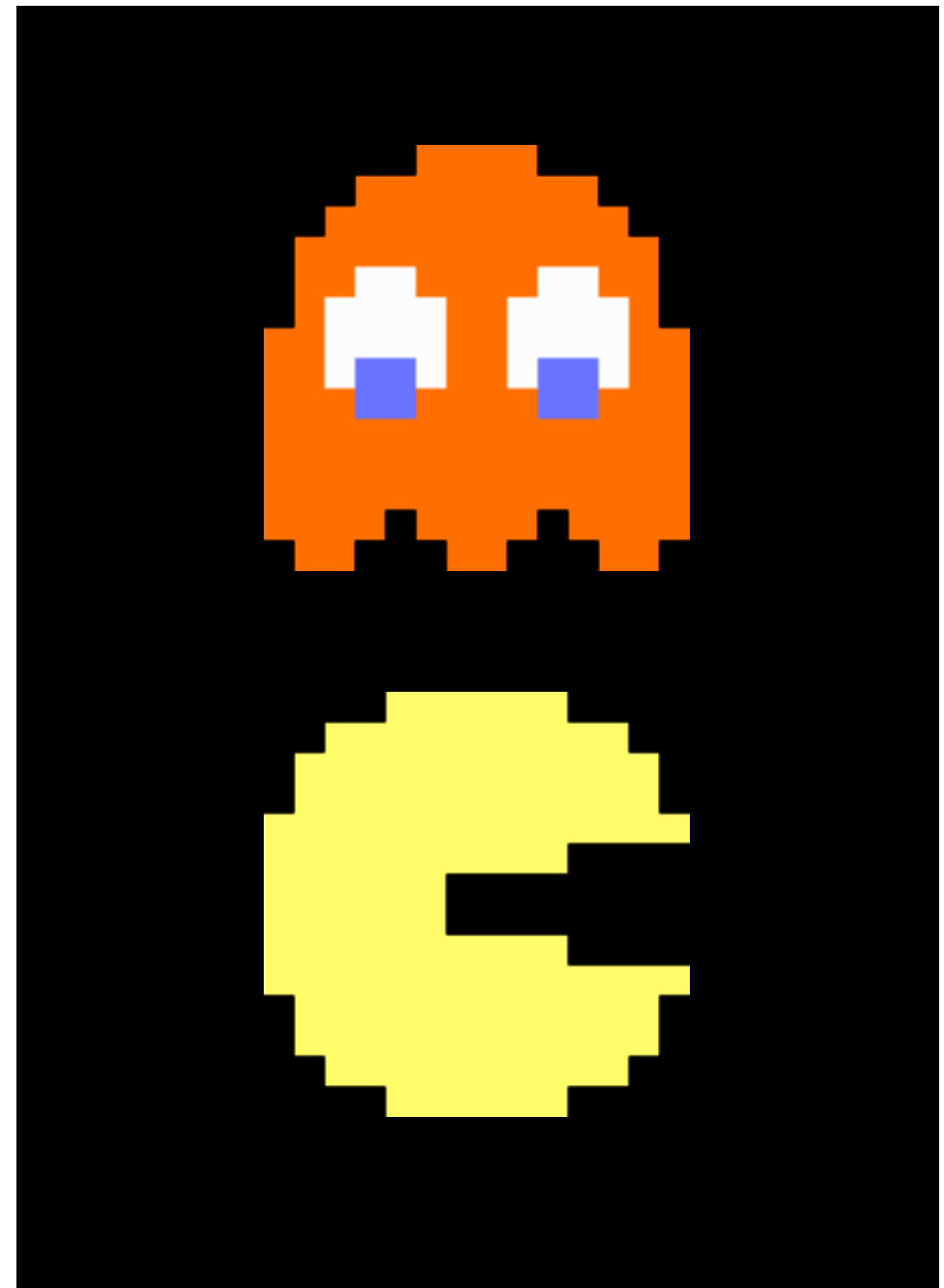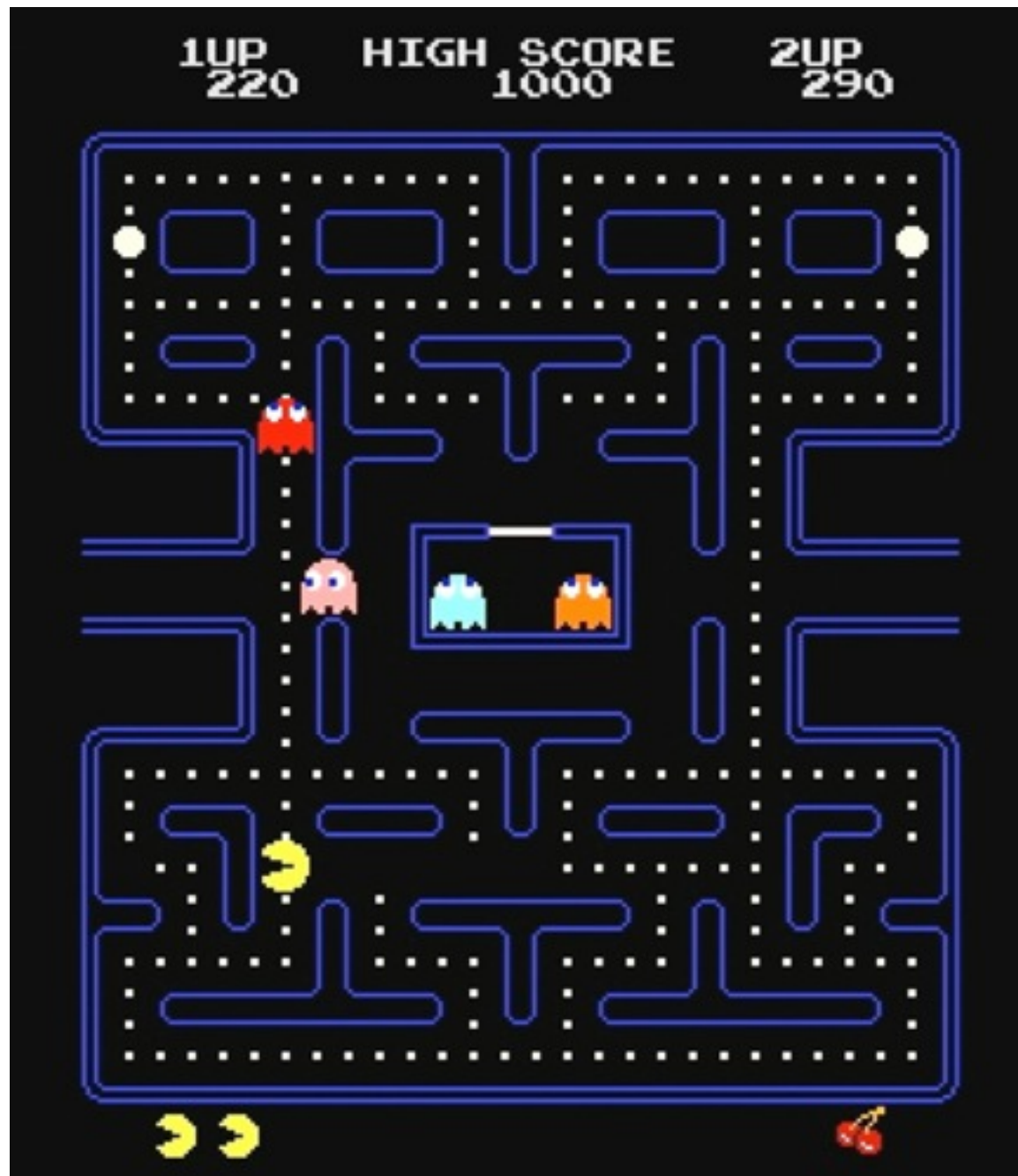- 2D game framework from Apple

sprites

animation

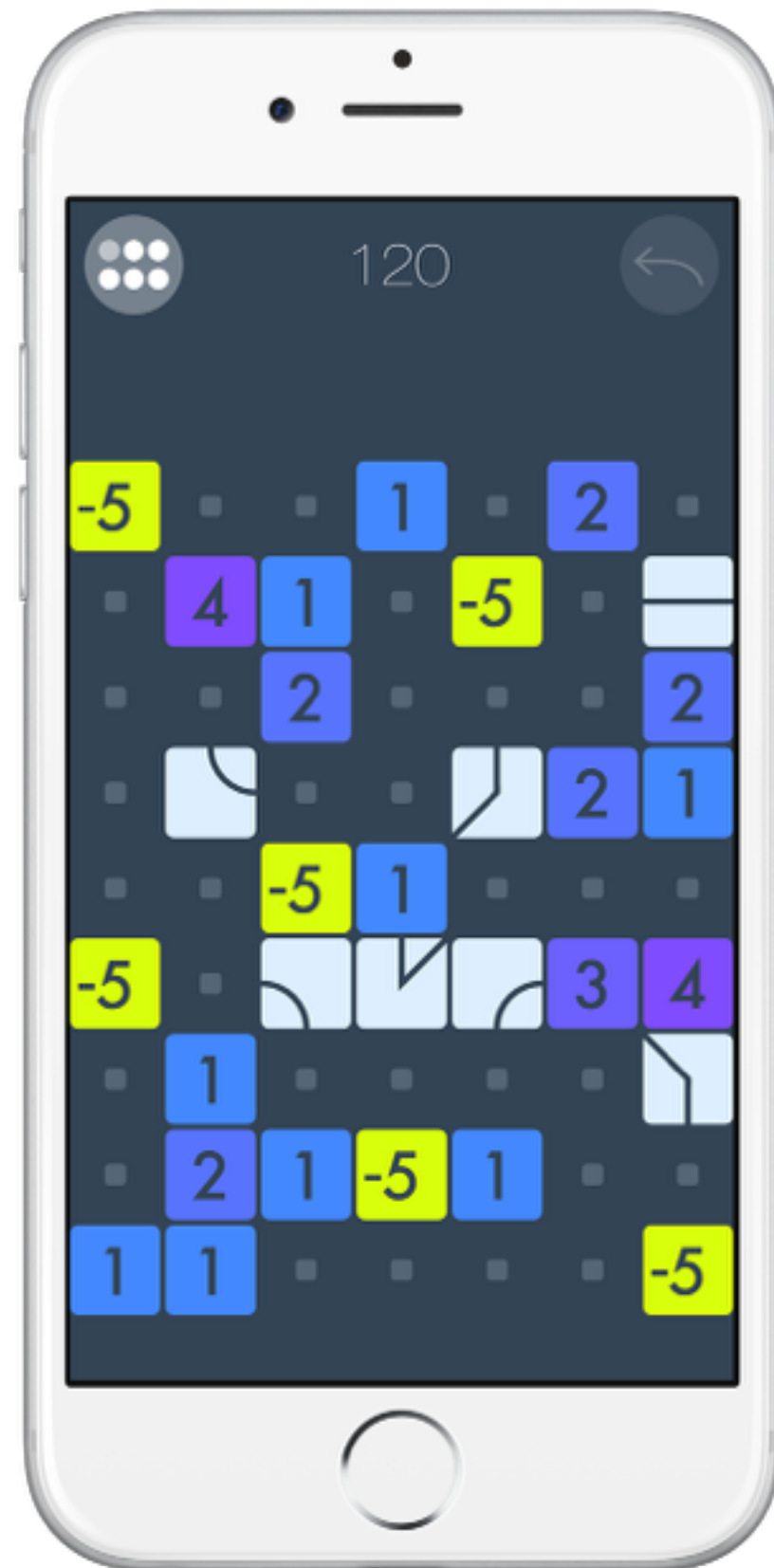emitters

particles
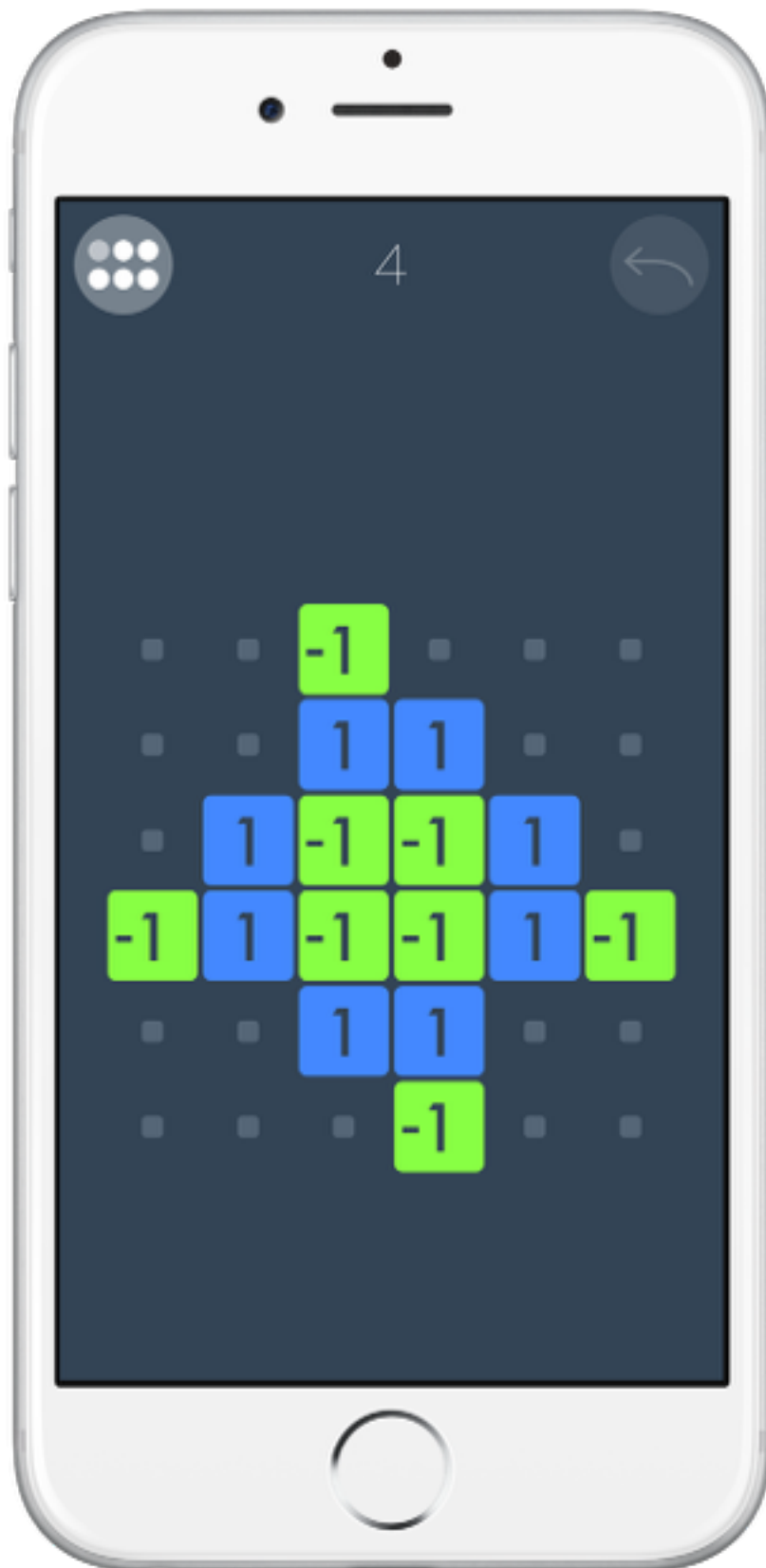
actions

physics

audio

events

gestures

Sprites

-2D bitmap images

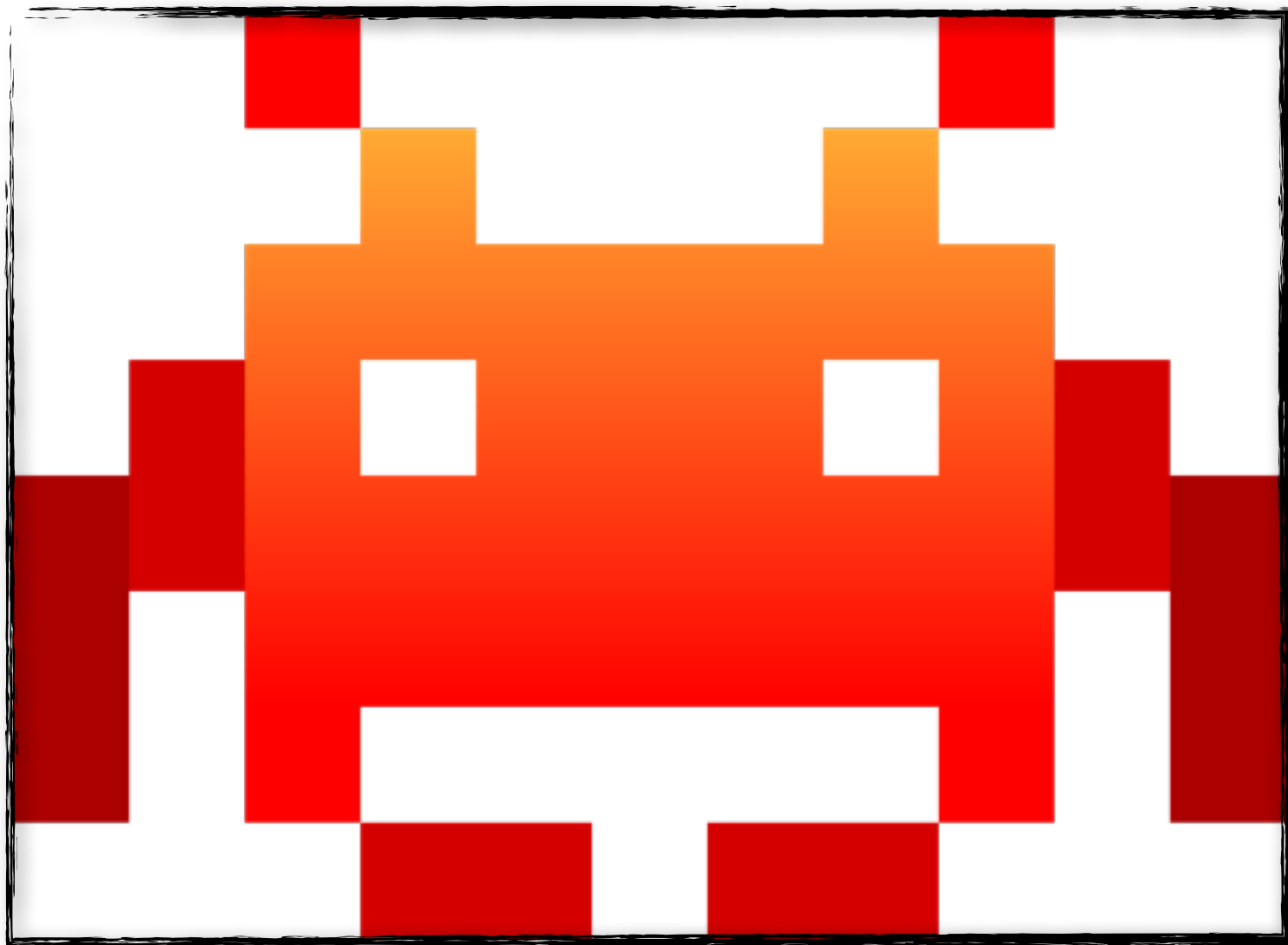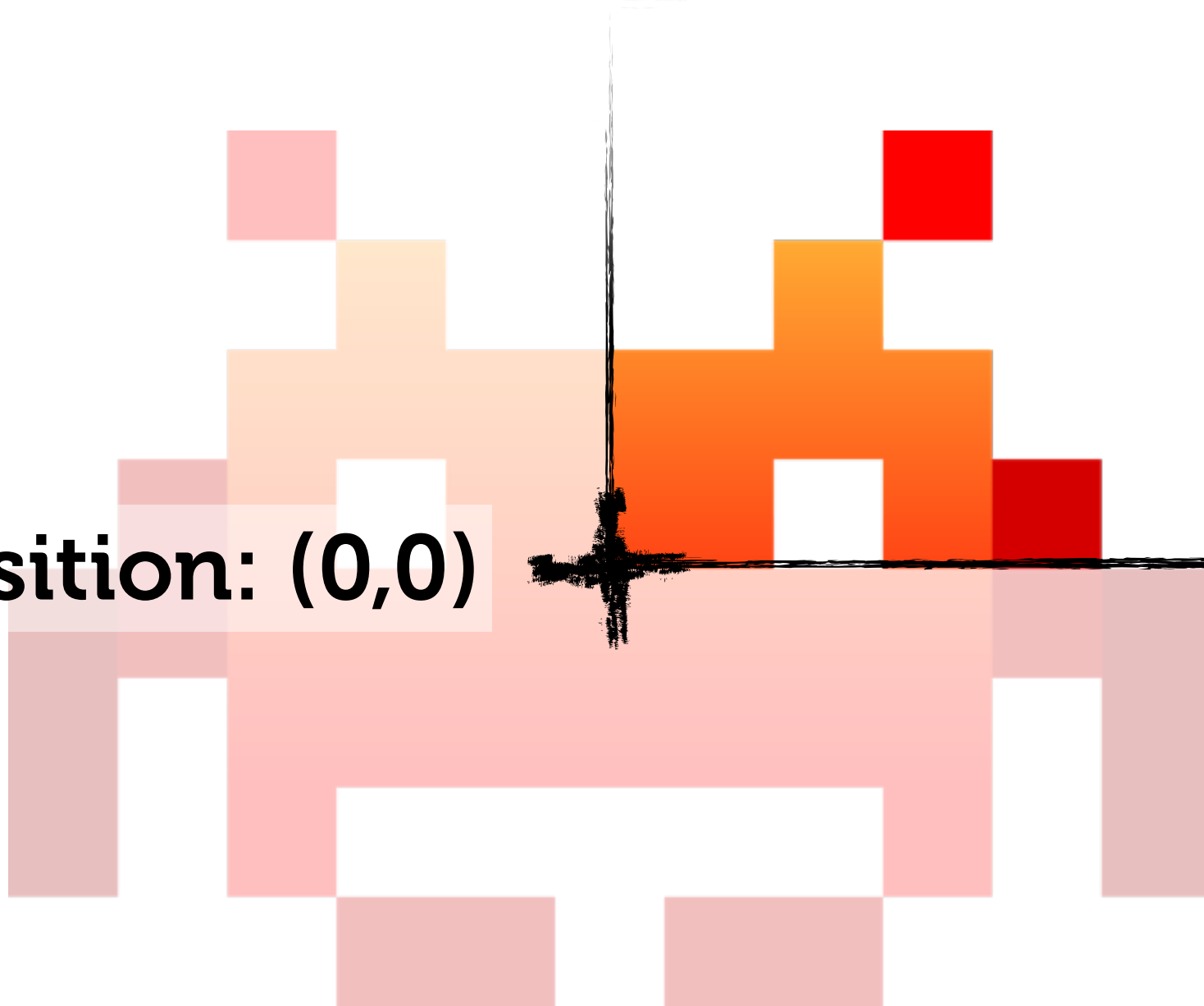# Zero+

Sprite

PNG (44px × 32px)

Sprite Anchor

anchor: (0.5,0.5)

Sprite Position

position: (0,0)

Sprite Position

position: (W,H)

Points, not pixels
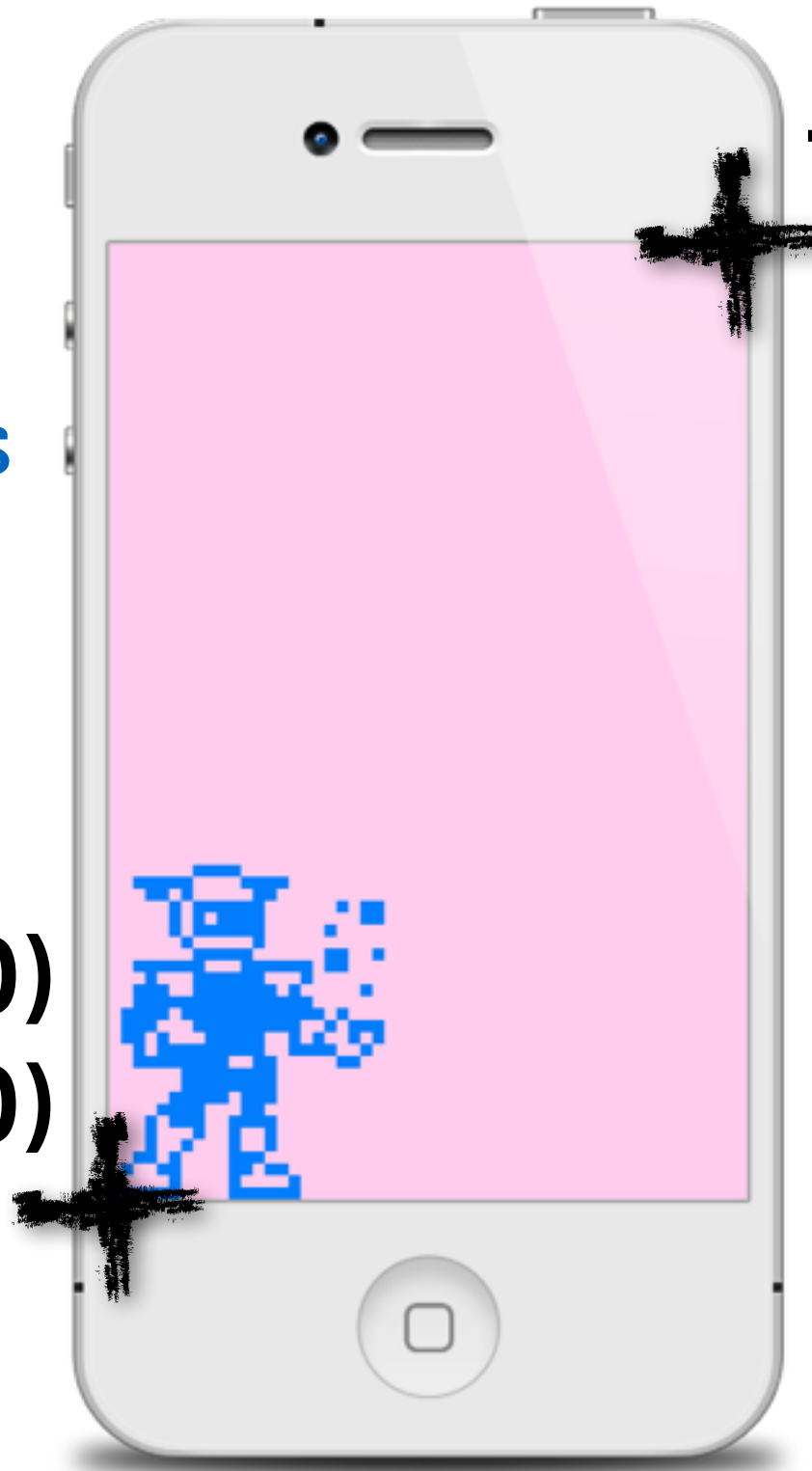
iPhone
320×480
320×568
375×667
414×736

iPad
768×1024
1536×2048

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

Sprite xScale, yScale

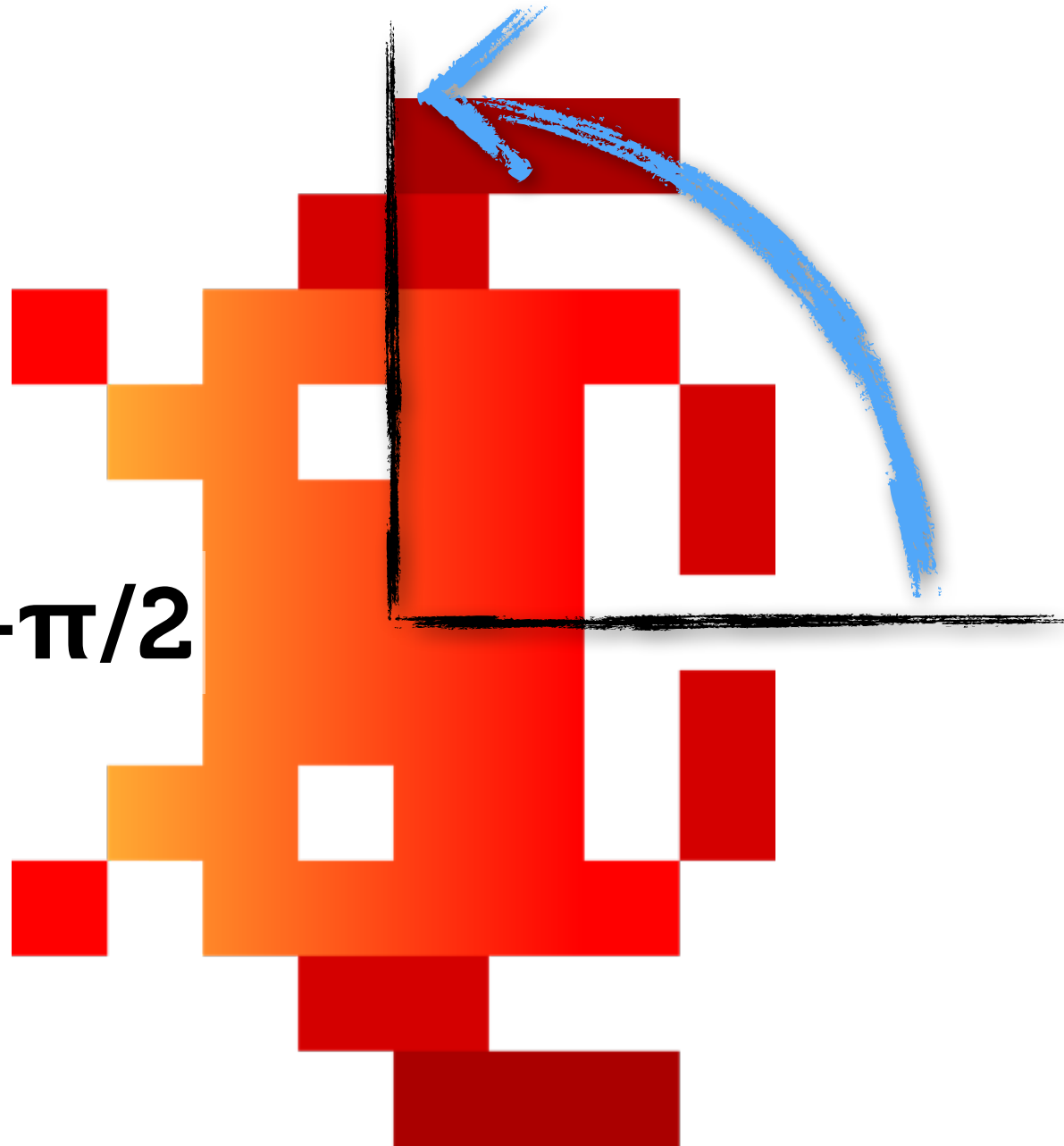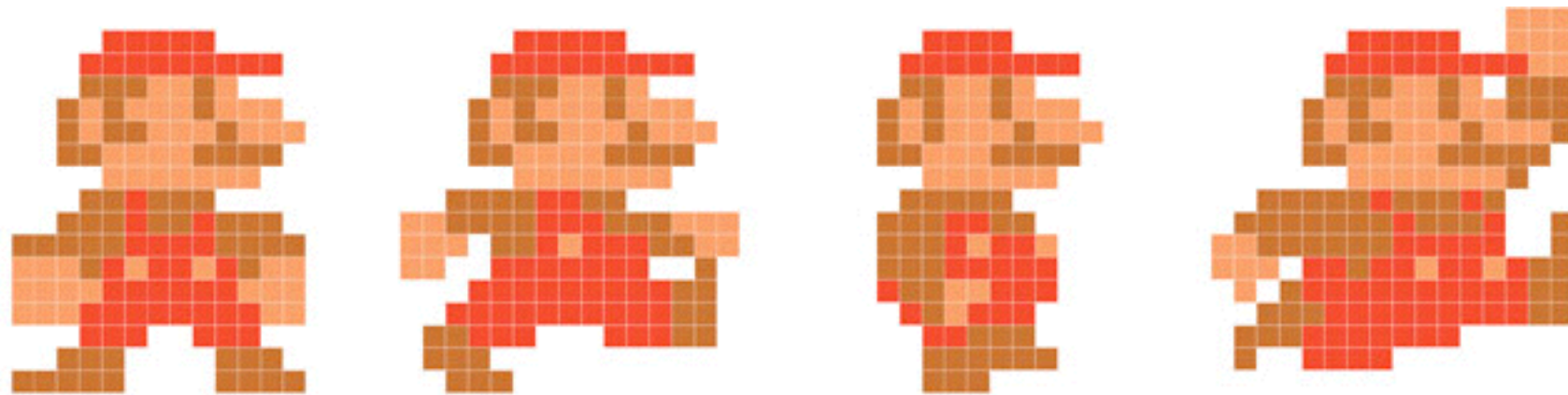

1.0
44px × 32px

2.0
88px × 64px

Sprite zRotation

zRotation: +π/2

Animation

- Animating a sprite

- Moving a sprite

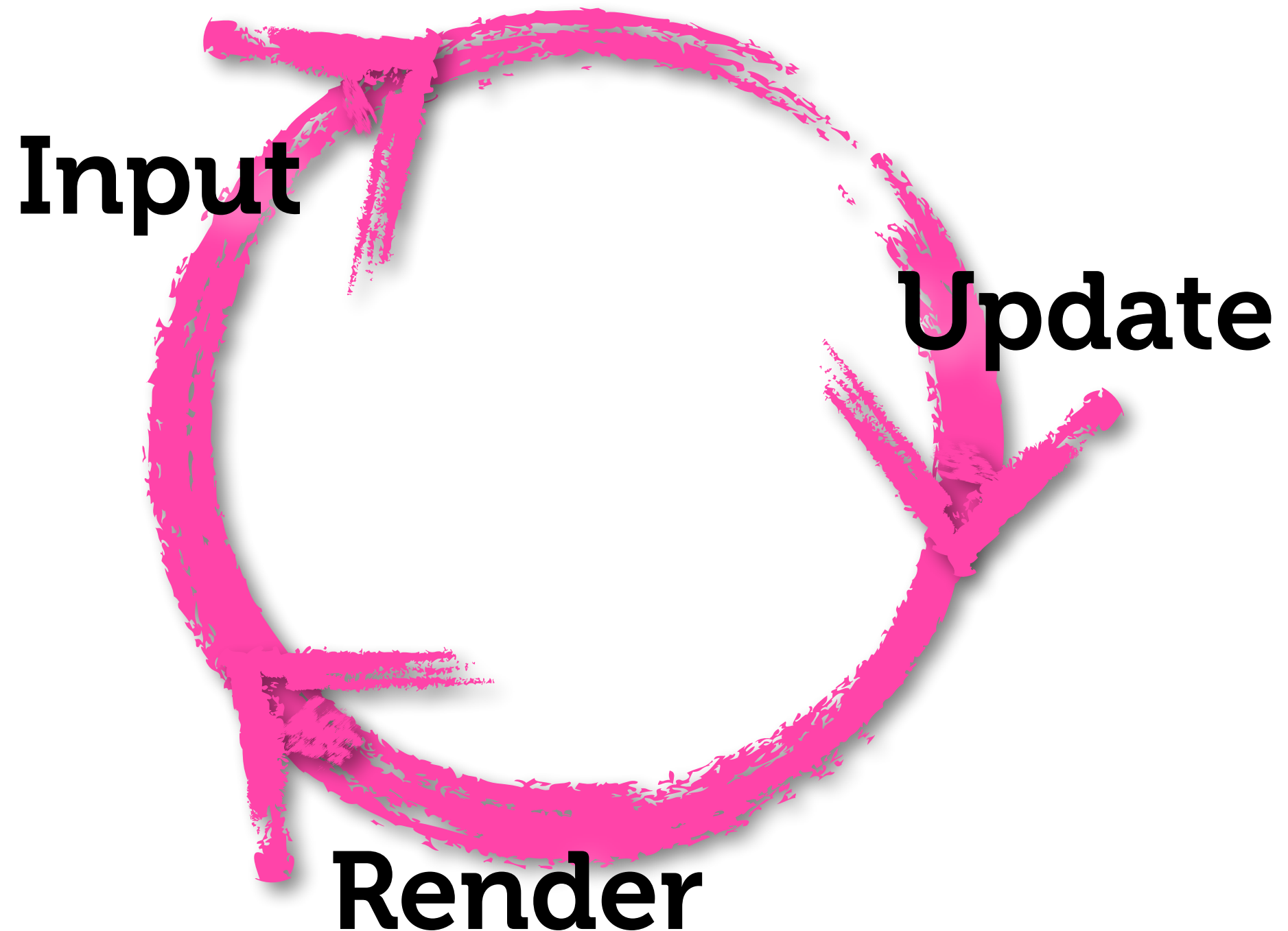# Touch Events

touchesEnded

touchesMoved

touchesBegan

(0,0) (25,25) (50,50) (75,75) (100,100)
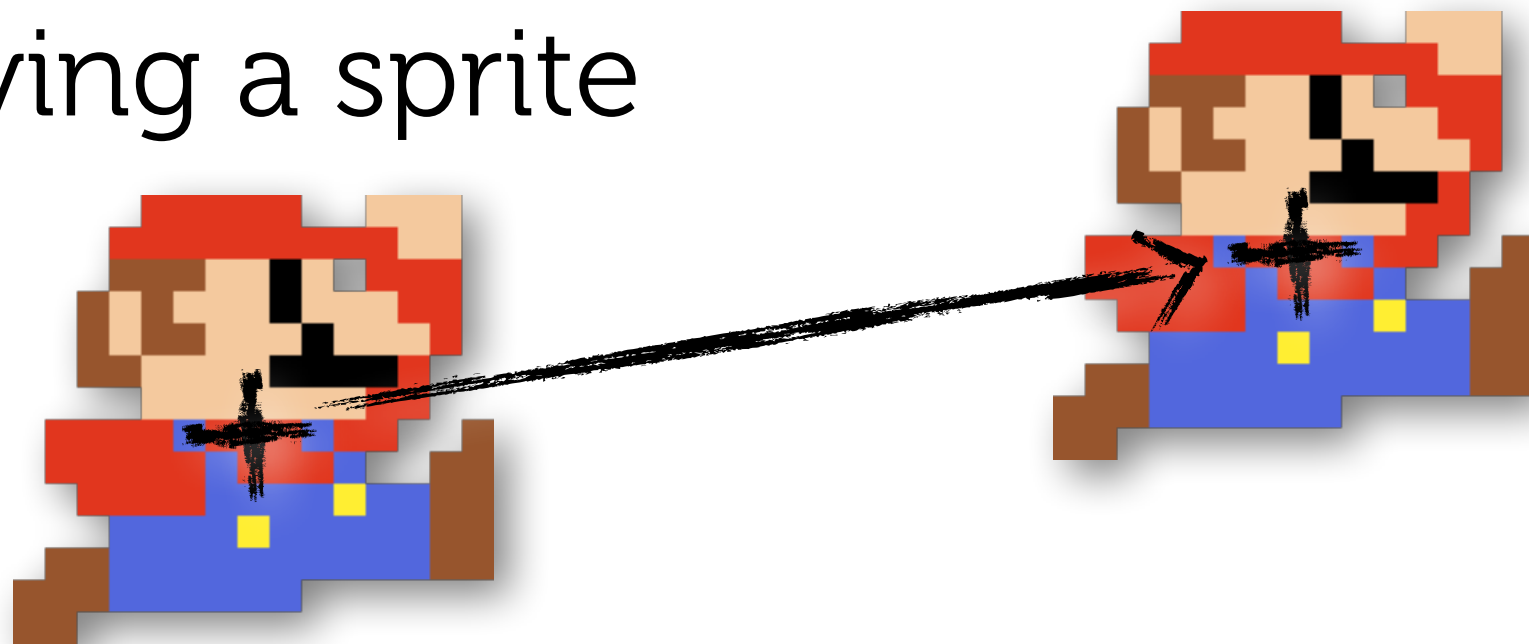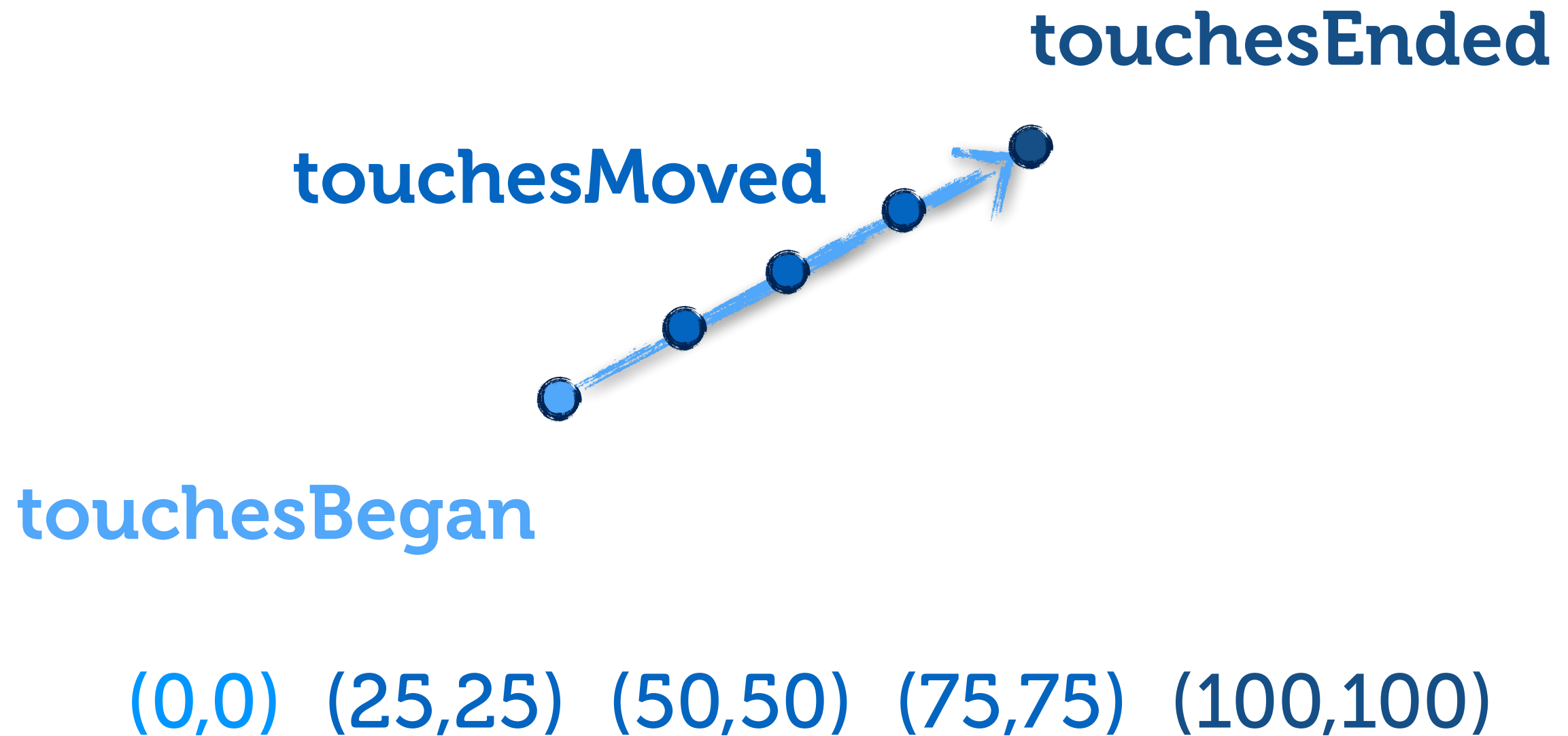
The Game Loop

Actions

- Implicit - built-in actions

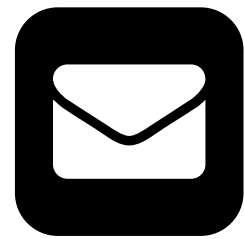 - fade, move, rotate, tint, …

```
SKAction.moveByX(25.0, y: 75.0, duration: 0.5)
SKAction.fadeOutWithDuration(0.5)
```

- Explicit - change property every frame

```
self.alien.position = CGPoint(x: 100.0, y: 100.0)
self.alien.alpha -= 0.002
```
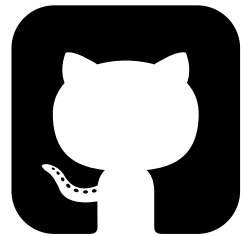
Code

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thezeroapp.com