Intro To Game Development With iOS 7 SpriteKit

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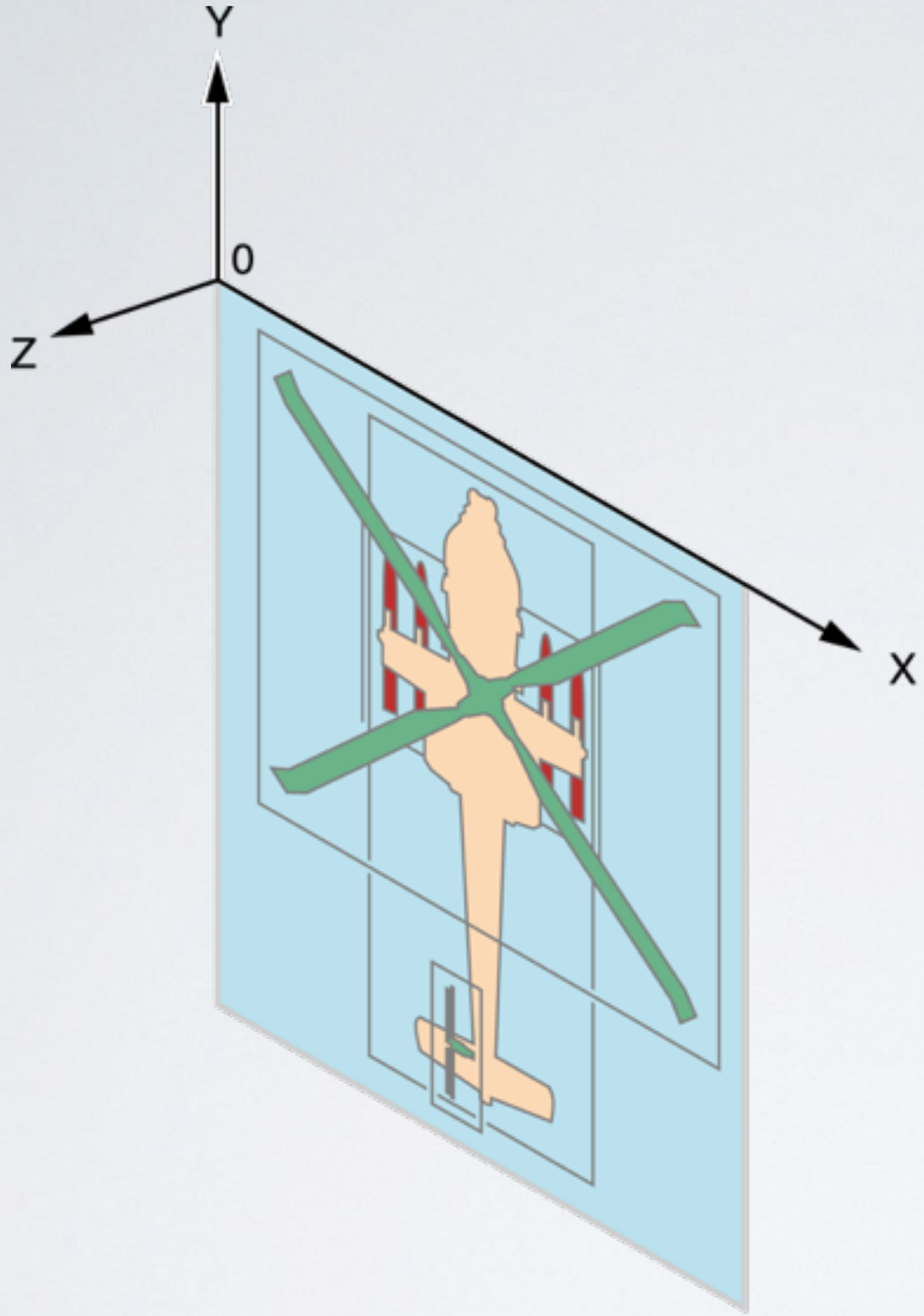
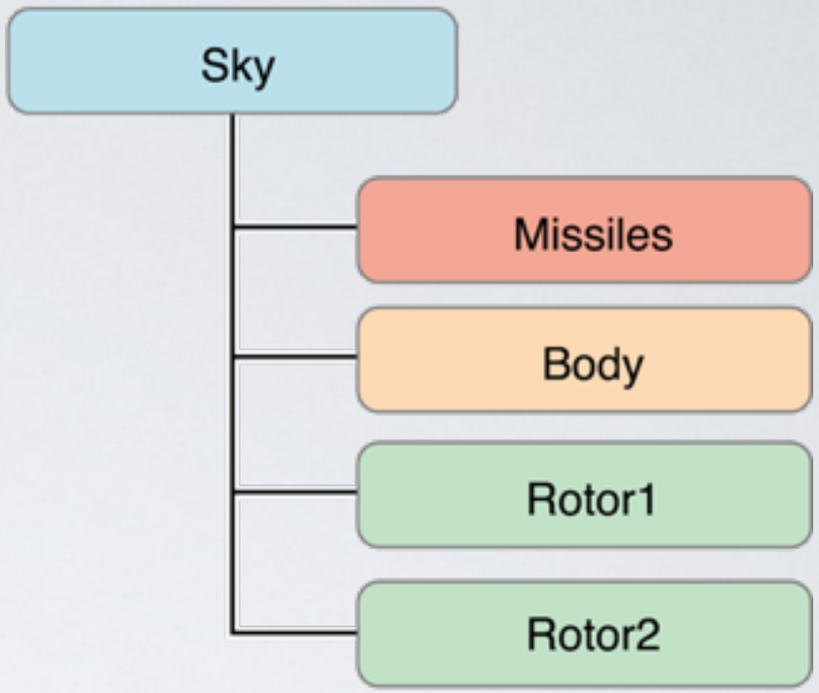
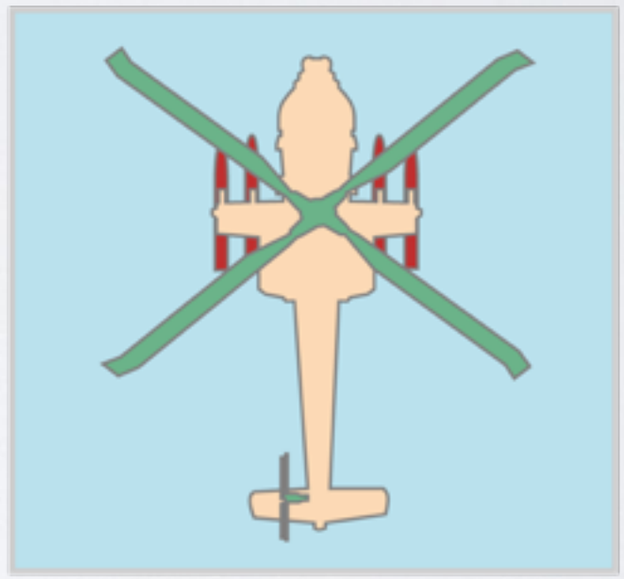
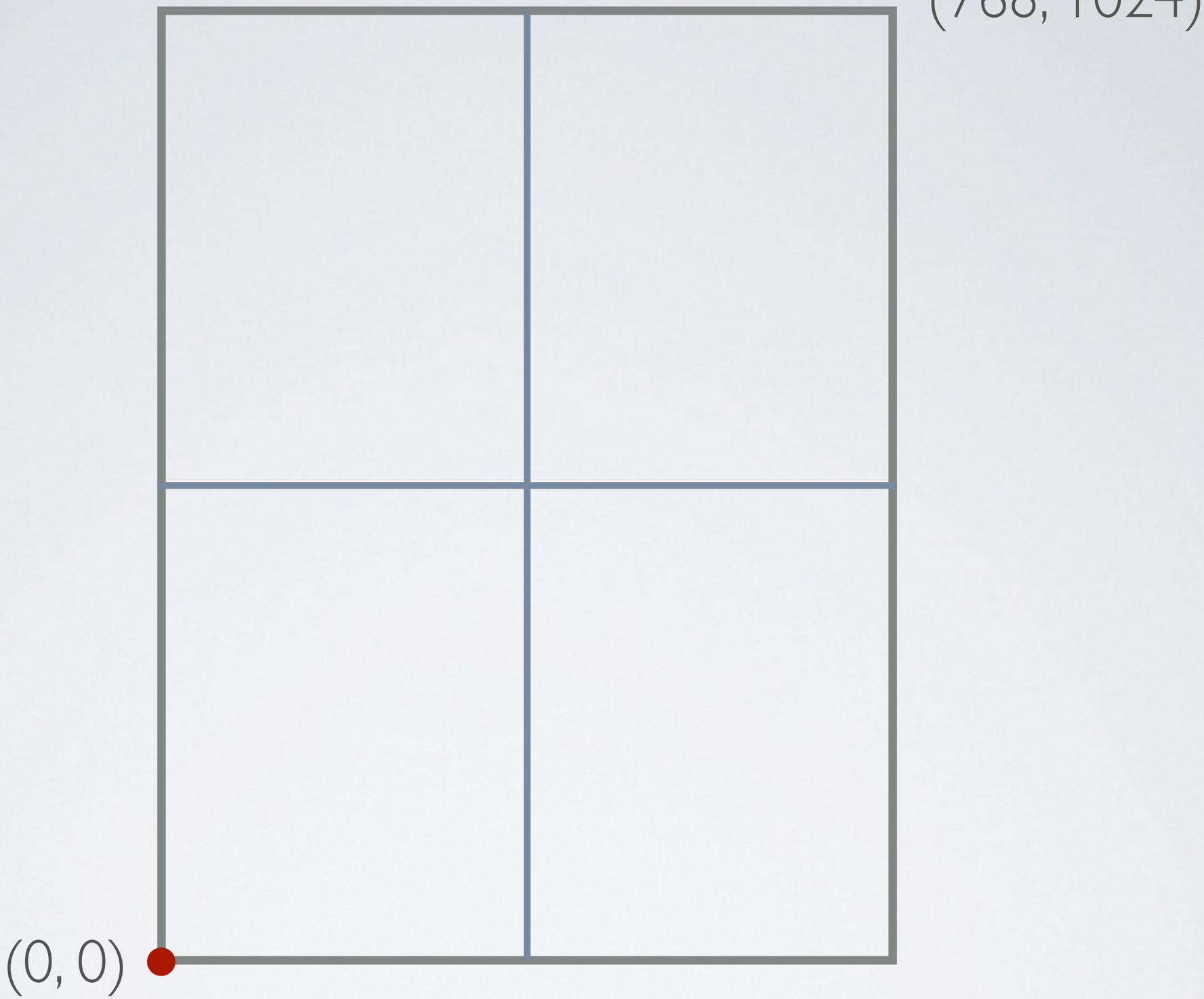
FieldSync Mobile Solutions



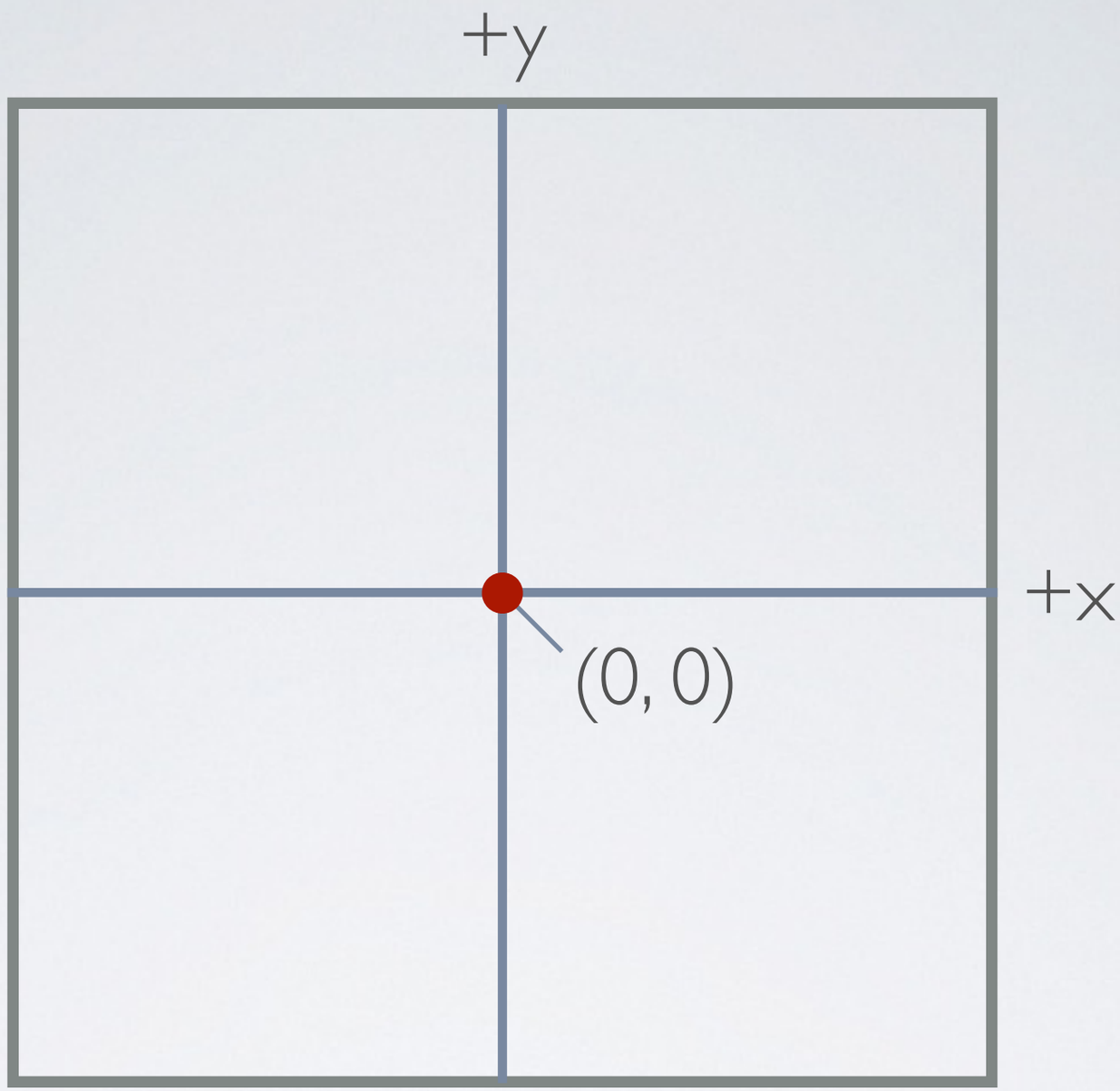




SKNode System



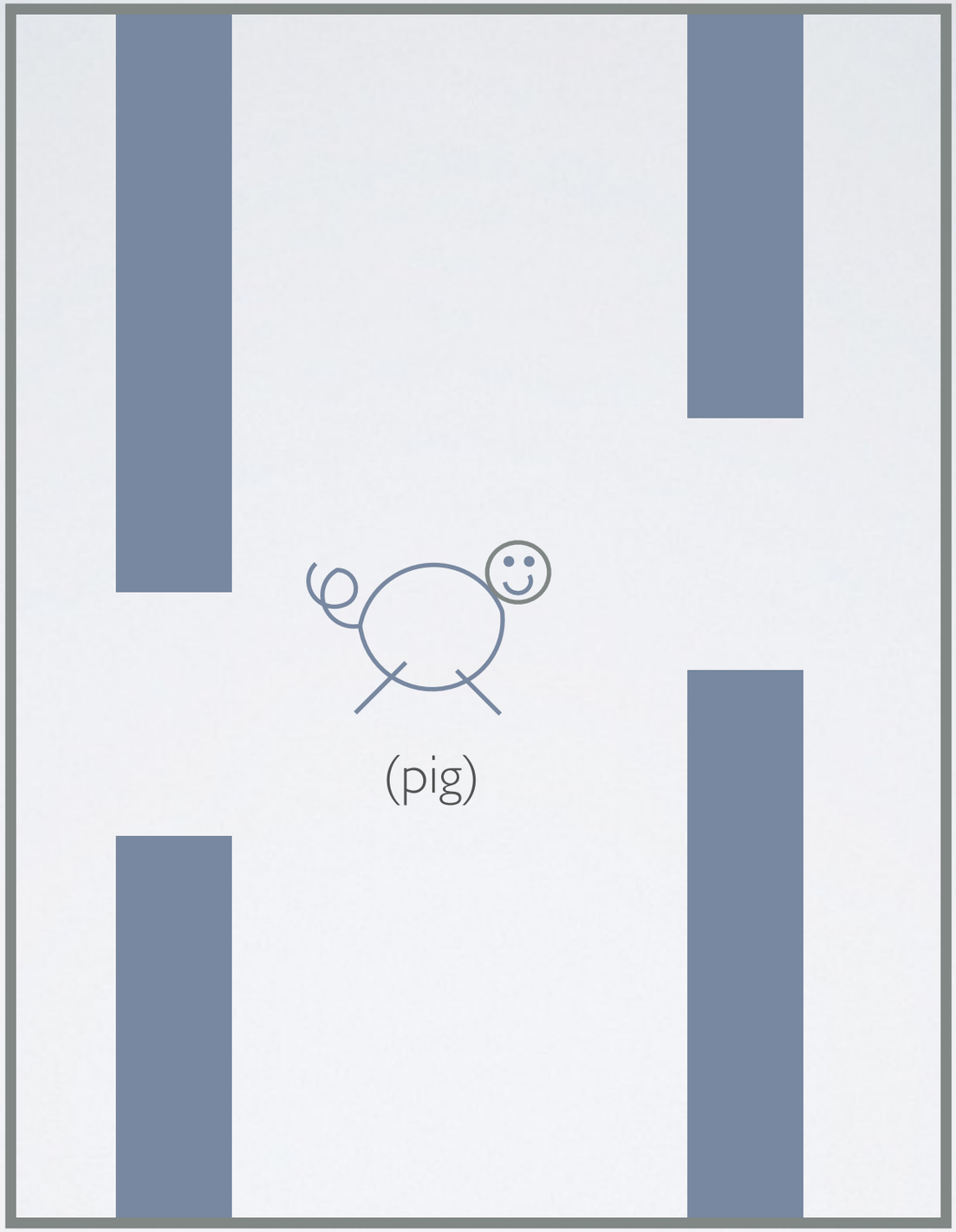
SKScene Coordinate System

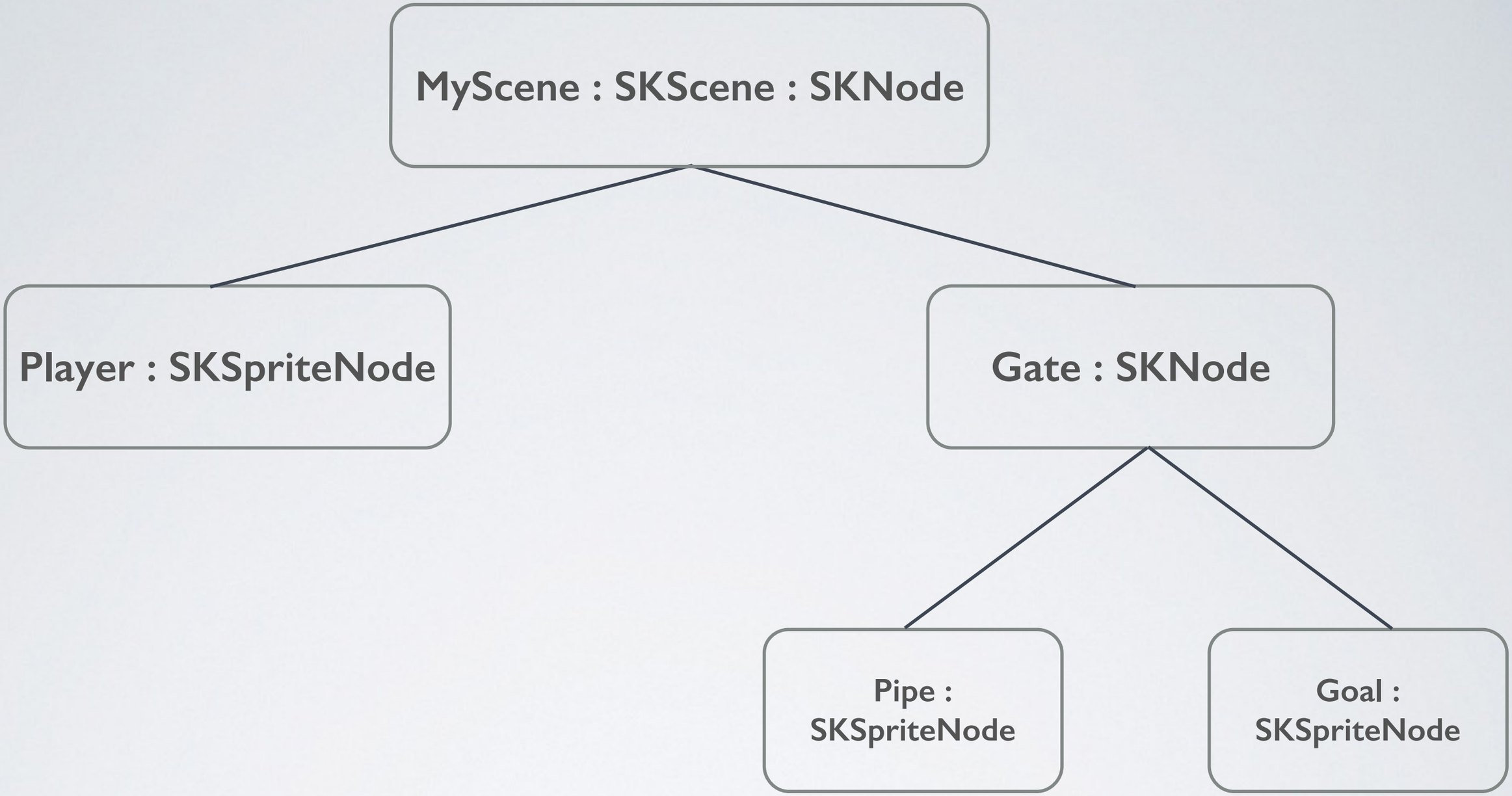


SKNode Coordinate System

```
// Initialize a sprite node
SKSpriteNode *myNode = [[SKSpriteNode alloc] initWithImageNamed:@“myImage”]];

// Set the node’s position
myNode.position = CGPointMake(x, y);

// This action moves the sprite to some position over time
SKAction *move = [SKAction moveTo:position duration:duration];

// This action removes the node from its parent
SKAction *removeFromParent = [SKAction removeFromParent];

// Run both actions serially by creating a sequence
[myNode runAction:[SKAction sequence:@[move, removeFromParent]]];
```

Flappy Pig


(pig)



Flappy Pig Node Tree

self.width = pipe.width + goal.width

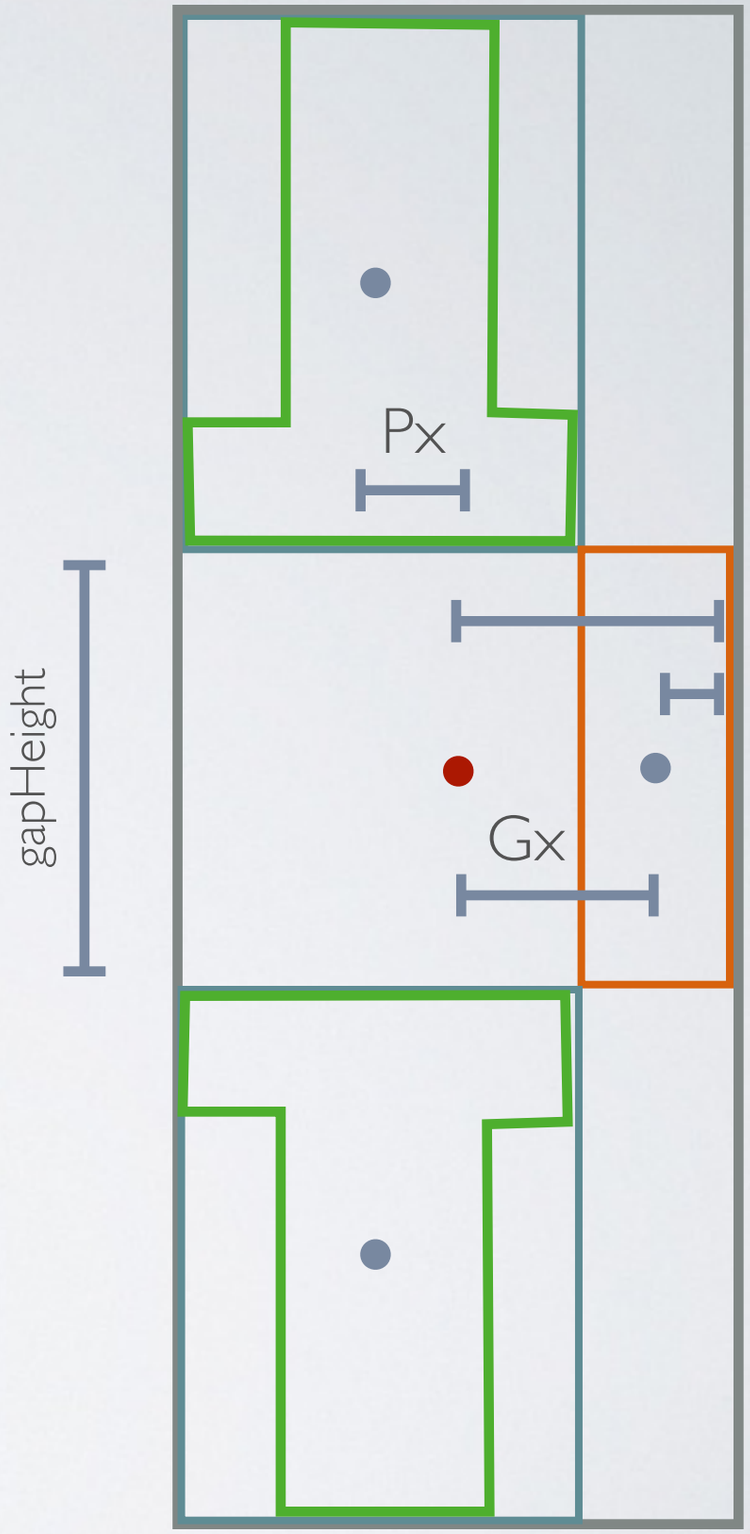
self.height = 2 * pipe.height + goal.height

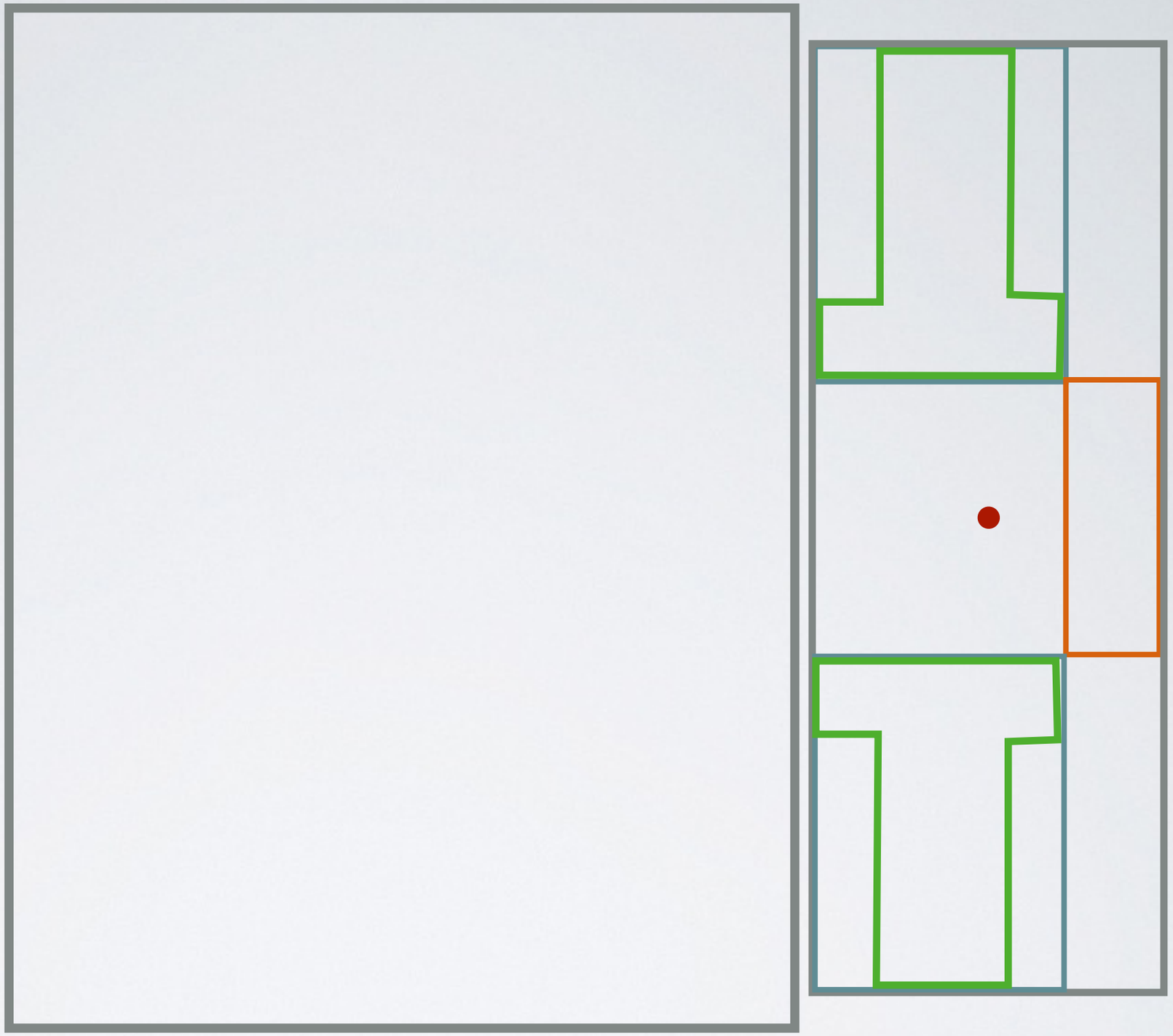
Gx = self.width / 2 - goal.width / 2

Gy = 0

Px = -(self.width / 2 - pipe.width / 2)

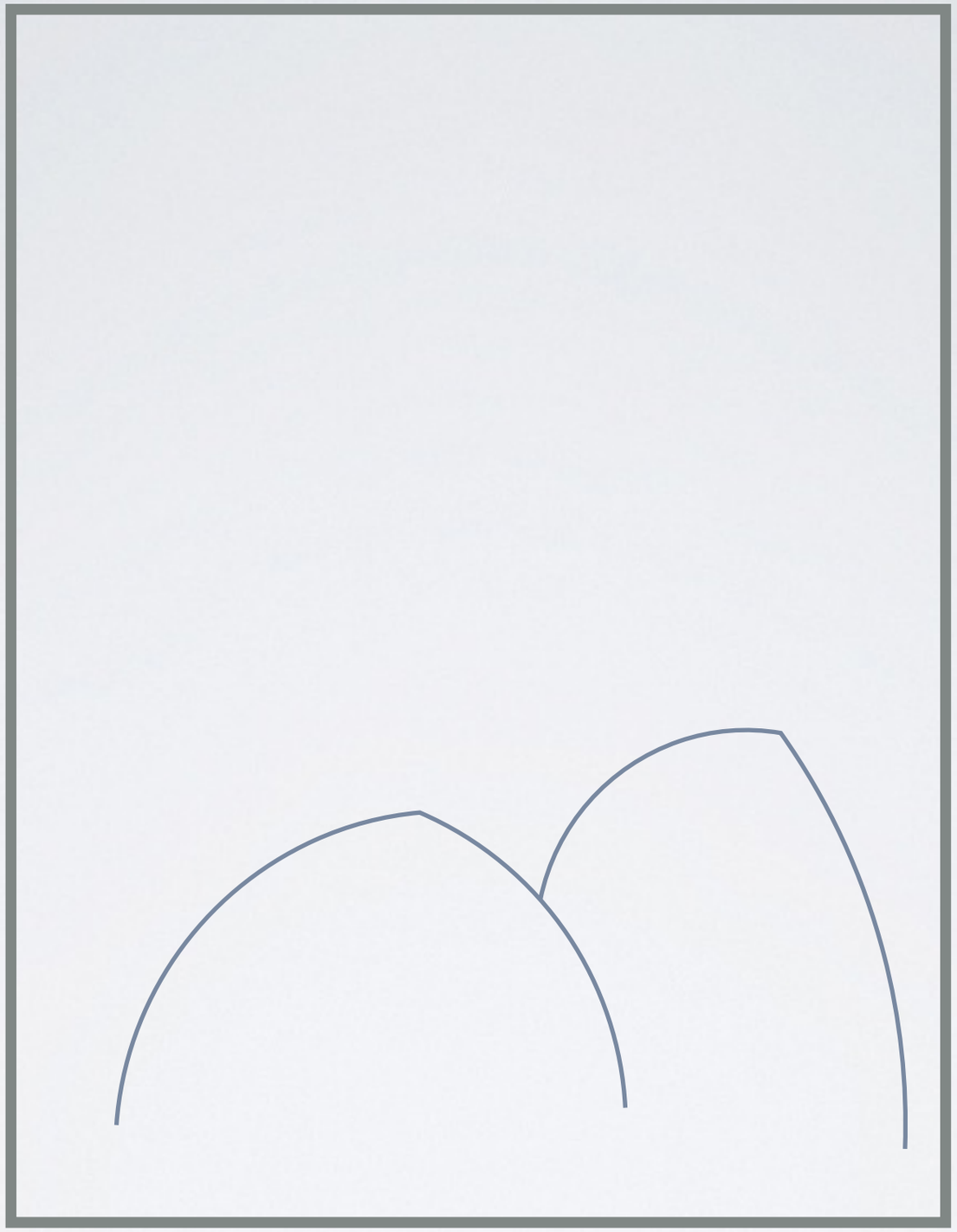
Py = ± (gapHeight / 2 + pipe.height/2)





startX = frame.width + gate.width/2

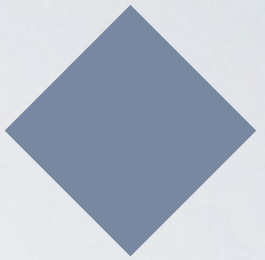
endX= - gate.width/2

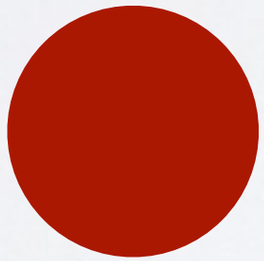


Collision

Bit Masks

```
Circle   = 0001
Square   = 0010
Triangle = 0100
Diamond  = 1000
```

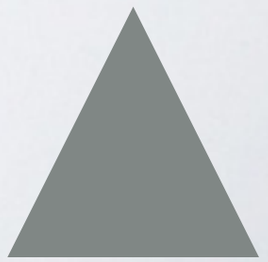




```
Contact = Square | Triangle
        = 0110
```

```
  0110
& 0010
------
  0010
```

```
  0110
& 1000
------
  0000
```



Sound

```
$ afconvert -f caff -d LEI16@44100 -c 1 swoosh.wav swoosh.caf
```

Useful Resources

- FlappyPig source and slide deck:

  http://github.com/ryanthompson0123/FlappyPig

- Apple's SpriteKit Programming Guide (Google it)

- Ray Wenderlich SpriteKit tutorials

  http://www.raywenderlich.com/tutorials