

Disconnecting Bodies from Joints

Disconnect joints from nodes in your scene.

Overview

You can use the `SKPhysicsWorld` method `remove(_:)` to remove joints from a simulation. By making use of the `update(_:for:)` method of the `SKSceneDelegate`, you can interrogate joint properties, such as the distance between the two connected bodies.

The following code shows an example. Each time a new spring joint is created, it is also added to an array named `springs` of type `[SKPhysicsJointSpring]`. With each simulation step, every spring is evaluated. If the distance between the two connected bodies is greater than `maxSpringDistance`, the spring is removed from both the physics world and the array.

```
var springs: [SKPhysicsJointSpring] = []
let maxSpringDistance: CGFloat = 31

// Each `scene.physicsWorld.add(spring)` is accompanied by `springs.append(spring)`

func update(_ currentTime: TimeInterval, for scene: SKScene) {
    for spring in springs {
        if let bodyAPosition = spring.bodyA.node?.position,
           let bodyBPosition = spring.bodyB.node?.position {
            let distance = hypot(bodyAPosition.x - bodyBPosition.x,
                                bodyAPosition.y - bodyBPosition.y)
            if distance > maxSpringDistance {
                scene.physicsWorld.remove(spring)
                if let index = springs.index(of: spring) {
                    springs.remove(at: index)
                }
            }
        }
    }
}
```