

Use SpriteKit Objects within Scene Delegate Callbacks

Follow threading guidelines to keep your SpriteKit app thread safe.

Overview

SpriteKit is largely a single threaded game engine and as such the API provides developers with callbacks to implement your custom game logic. The primary callback for your game logic is `update(_:for:)`. Modifying SpriteKit objects outside of the scene delegate callbacks (such as in a background queue or anything else not running on the main thread) can result in concurrency related problems. Even dispatching work on the main thread asynchronously or at a later time is risky because the closure is likely to be done outside of the timeframe SpriteKit expects. If you're experiencing a segmentation fault or other type of crash occurring deep within the SpriteKit framework, there's a good chance your code is modifying a SpriteKit object outside of the scene delegate callbacks.

Note: To check at runtime if a particular block of code is running on the main thread, inspect `NSThread isMainThread`.