

Abusing Game Technologies for Testing and Debugging

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What's the network state?

- Web service request made
- Web service request being processed
- Bluetooth LE device detected
- Bluetooth LE device sent some data
- Bluetooth LE device went away
- Precise diagnostic values: voltage, sensor values

```
NSLog(@"%@", annotation.markerProperties);
```

AVFoundation

- AVSpeechSynthesizer
- AVSpeechUtterance
- iOS 7.0+, tvOS 7.0+, watchOS 2.0+
- macOS: NSSpeechSynthesizer, startSpeakingString

```
class FerriesCoreDataStack {
    lazy var speechSynthesizer = {
        return AVSpeechSynthesizer()
    }

    var shouldAnnounce = true

    func announce(_ string: String) {
        if shouldAnnounce {
            let utterance = AVSpeechUtterance.init(string: string)
            speechSynthesizer.speak(utterance)
        }
    }
}
```

```
func updatePositionsData () {  
    announce("positions update")
```

```
func beginContinuousUpdates() {  
    announce("\(function) line \(#line). Starting continuous updates")  
    networkUpdatesTimer = Timer.scheduledTimer(withTimeInterval: 8.0,  
                                                repeats: true,  
                                                block: { (timer) in  
            self.updatePositionsData()  
        })  
}
```

Screen recording

- Where were you?
- What did you see on the screen right before it disconnected?
- No that's impossible! Really, what was on the screen?
- Demos, marketing, training

ReplayKit

- RPScreenRecorder
- RPPreviewViewController
- RPPreviewViewControllerDelegate
- iOS 9.0+, tvOS 10.0+

```
import UIKit
import ReplayKit

class DebugViewController: UIViewController, RPPreviewViewControllerDelegate {

    @IBOutlet weak var startRecordingButton: UIButton!
    @IBOutlet weak var stopRecordingButton: UIButton!
    @IBOutlet weak var speakShushSegmentedControl: UISegmentedControl!

    var previewViewController: RPPreviewViewController?
```

```
@IBAction func startRecording(_ sender: Any) {
    let recorder = RPSScreenRecorder.shared()
    if recorder.isAvailable {
        recorder.isMicrophoneEnabled = true
        if #available(iOS 10.0, *) {
            recorder.startRecording(handler: { (error) in
                if error == nil {
                    debugPrint("recording")
                    self.startRecordingButton.isHidden = true
                    self.stopRecordingButton.isHidden = false
                }
                else {
                    print(error?.localizedDescription ?? "")
                }
            })
        } else {
            // Fallback on earlier versions
        }
    } else {
        // Display UI for recording being unavailable
    }
}
```

```
@IBAction func stopRecording(_ sender: Any) {
    startRecordingButton.isHidden = false
    stopRecordingButton.isHidden = true
    RPSScreenRecorder.shared().stopRecording { previewViewController, error in
        if let error = error {
            print("error", error)
        }
        if UI_USER_INTERFACE_IDIOM() == UIUserInterfaceIdiom.pad {
            previewViewController?.modalPresentationStyle = UIModalPresentationStyle.popover
            previewViewController?.popoverPresentationController?.sourceRect = CGRect.zero
            previewViewController?.popoverPresentationController?.sourceView = self.view
        }
        if let previewViewController = previewViewController {
            self.previewViewController = previewViewController
            previewViewController.previewControllerDelegate = self
            self.show(previewViewController, sender: self)
        }
    }
}

// MARK: - RPPreviewViewControllerDelegate
func previewControllerDidFinish(_ previewController: RPPreviewViewController) {
    previewController.dismiss(animated: true)
}
```

**Allow screen recording in
"Ferries In Class"?**

You can save the recording to the
camera roll or share it with friends.
Record microphone audio if you want
to add comments as you go.

[Record Screen & Microphone](#)

[Record Screen Only](#)

[Don't Allow](#)

iPad



5:16 PM

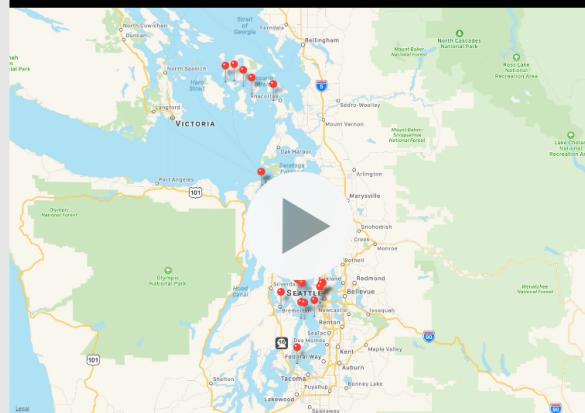
100% ⚡

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Ferries In Class

June 8 05:15 PM



Create Sample Data

Start Recording

[Speak](#) [Shush](#)



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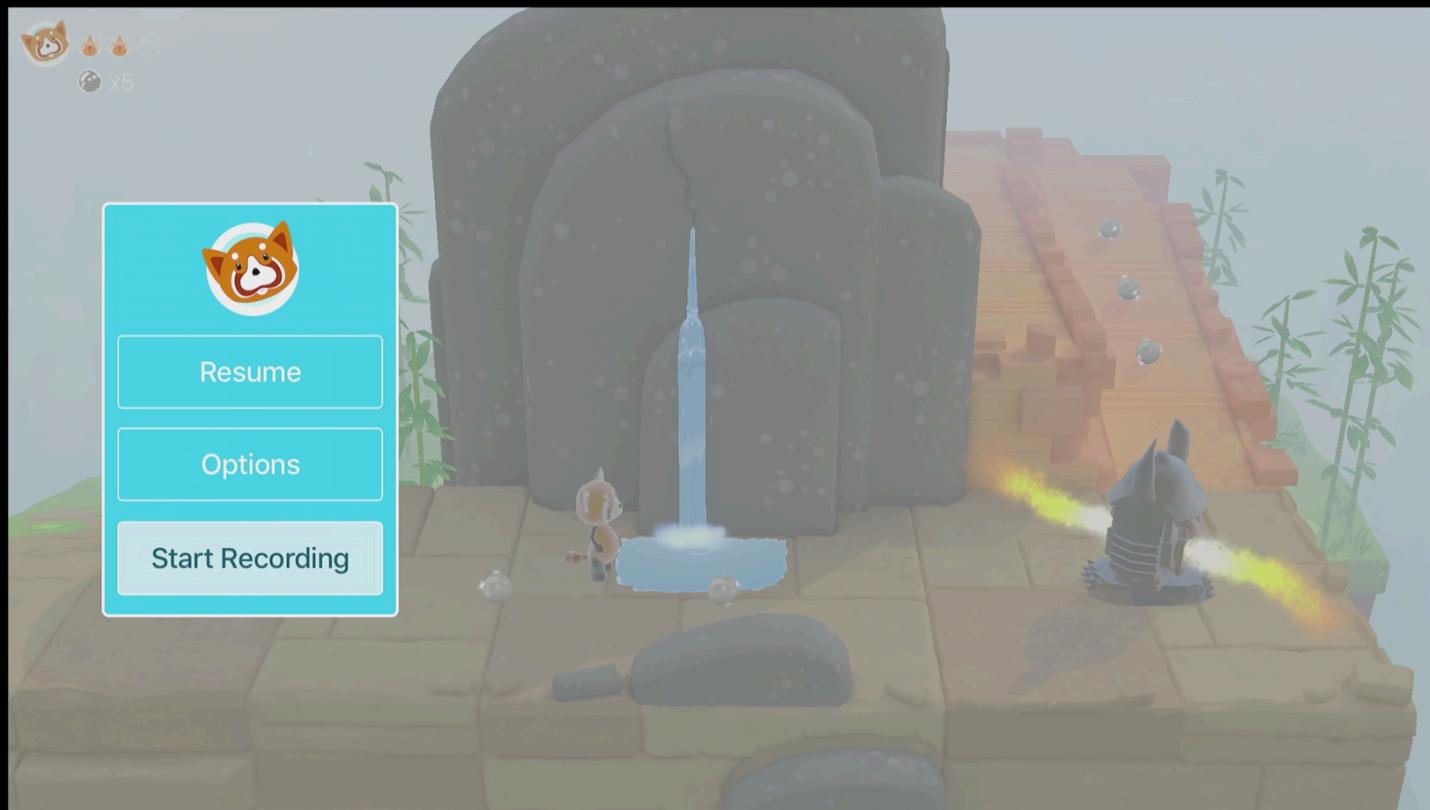
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