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Kansas City Mobile .NET Developers Group

Flying a drone from an Apple Watch? GTFOH!

Started with an invitation

 Developer

You're invited to test your apps on Apple Watch.

We're looking forward to the innovation you'll bring to the most personal product Apple has ever made. If you have a WatchKit app, Glance, or notification that's ready to test on Apple Watch, you can reserve a day for testing at one of our upcoming labs.

The Xamarin devs r0x0r!

March 6, 2015

Like Clockwork, Xamarin Releases Watch Kit Support

By Miguel de Icaza

We're very excited to announce official support for Apple's just-released Watch Kit.

To start building Watch apps with Xamarin immediately:

- Download the official Xcode 6.2 release from Apple.
- Update **Xamarin.iOS** to the latest version.

What you can do

- Three primary Apple Watch interactions

    - WatchKit Application

    - Glances

    - Actionable Notifications

- Digital crown (scrolling only at the moment)

- Tap gestures

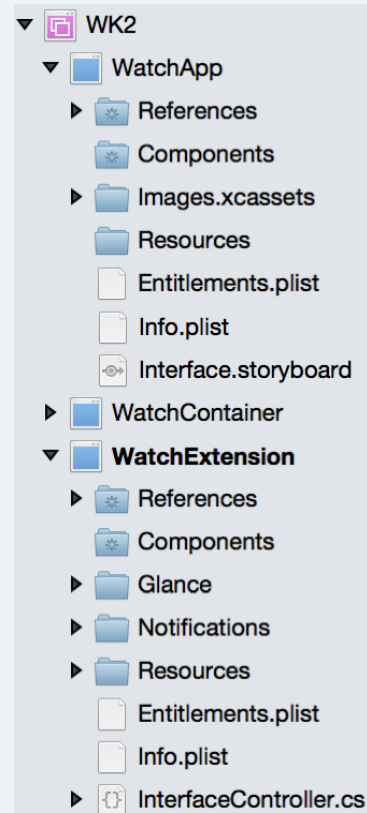- Annnnnnd…

Force ~~Choke~~ Touch

* http://developer.xamarin.com/guides/ios/watch/controls/menu/

Solution Architecture

- Watch Container / Parent app

- Watch Extension

- Watch Application

```
▼ 🔲 WK2
  ▼ 🟦 WatchApp
    ▶ ⚙️ References
      📁 Components
    ▶ 📁 Images.xcassets
      📁 Resources
      📄 Entitlements.plist
      📄 Info.plist
      ⊙ Interface.storyboard
  ▶ 🟦 WatchContainer
  ▼ 🟦 WatchExtension
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    ▶ {} InterfaceController.cs
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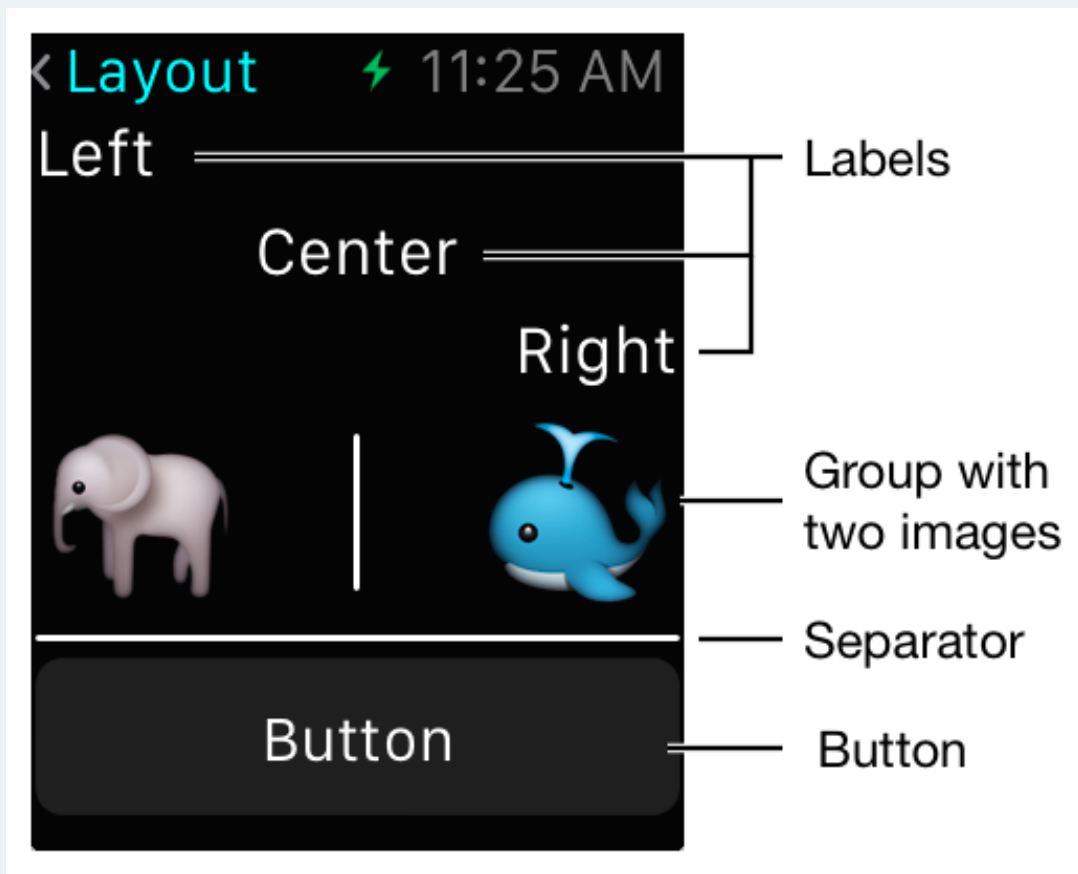# Solution Architecture

About Watch Kit

- iOS "Parent or Container" App
  - Watch Extension
  - Watch App (delivered to watch)
- Watch Extension and App communicate!
  - Code runs in Extension on iPhone
  - UI (storyboard, images) is loaded on the watch itself

iOS App

iPhone app
C# code & UI

iOS Watch Kit
Extension

Watch C# code

⚡ 2:43 PM
Clicked 8 times

Button

Watch Kit
App

UI

WKInterfaceController

- Serves the same purpose as a View Controller in iOS

  - Presents and manages content on the screen

  - Responds to user interaction

- Unlike a View Controller, it does not manage the View

  - Handled by WatchKit

Creating the User Interface

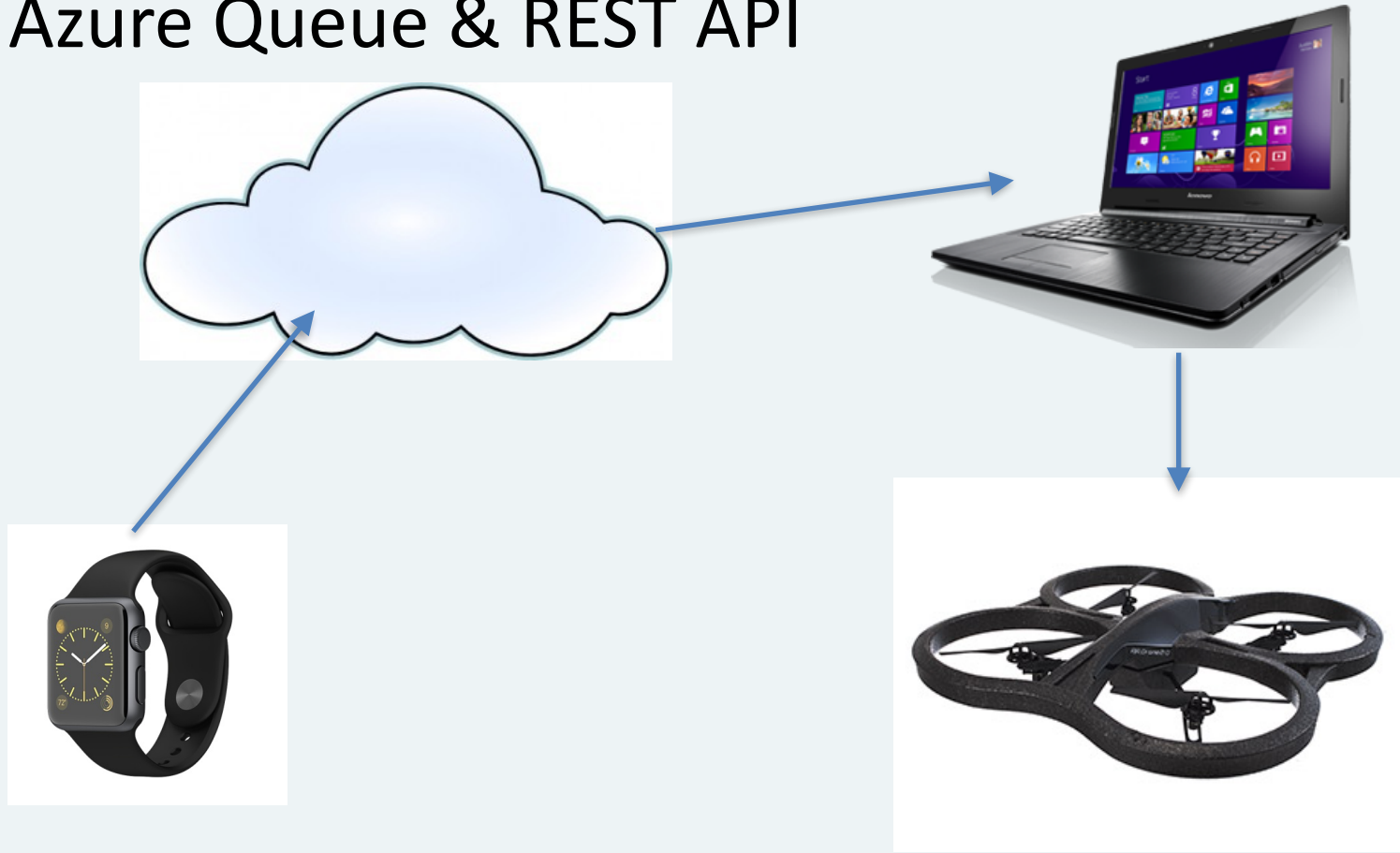# Assembling Your Storyboard Scenes

The App Idea

The challenge

- I'll be in California

- Drone will be in Missouri

TO THE CLOUD!

quickmeme.com

AR.Drone C# Project

- Fly the drone through a WinForms app

- Built using C#

- https://github.com/Ruslan-B/AR.Drone

- Piece that issues commands directly to the AR Drone 2.0

Azure Queue & REST API

Apple Dev Lab

SECURITY NOTICE

NO PHOTOS OR VIDEO ALLOWED.

DEMO

Demo gawds!!!

- https://www.facebook.com/bernsteinrein/videos/vb.11770529289/10152845606549290/

Useful Links

- Apple's WatchKit Site - *THE* source (Programming Guide)

    - https://developer.apple.com/watchkit/

- Apple Watch Programming Guide

    - https://developer.apple.com/library/prerelease/ios/documentation/General/Conceptual/WatchKitProgrammingGuide/

- Craig Dunn's wealth of WatchKit knowledge

    - http://conceptdev.blogspot.com/2015/02/apple-watch-kit-round-up.html

- Xamarin's Developer Documentation

    - http://developer.xamarin.com/guides/ios/watch/intro-to-watchkit/

- Xamarin's Blog Post

    - http://blog.xamarin.com/xamarin-releases-watch-kit-support-like-clockwork/

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Thank You

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