DESIGN TIME

IBDesignable

[Technically a toolchain feature, but WWDC 2014 is all a blur.]

Today we will be building

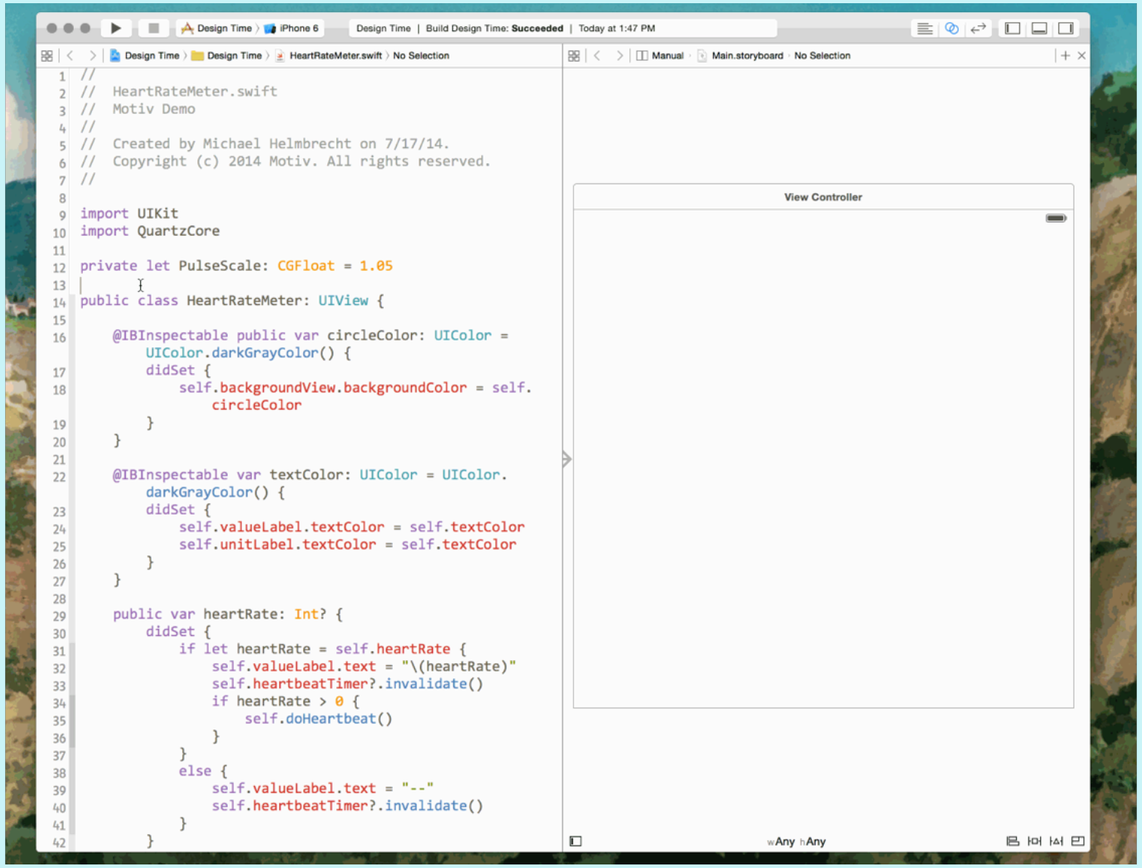
Just one keyword

```
@IBDesignable
class HeartRateMeter: UIView {

  // ...lots of great view code in here...

}
```

Automagically :




```
//
//  HeartRateMeter.swift
//  Motiv Demo
//
//  Created by Michael Helmbrecht on 7/17/14.
//  Copyright (c) 2014 Motiv. All rights reserved.
//

import UIKit
import QuartzCore

private let PulseScale: CGFloat = 1.05

public class HeartRateMeter: UIView {

    @IBInspectable public var circleColor: UIColor =
        UIColor.darkGrayColor() {
        didSet {
            self.backgroundView.backgroundColor = self.
                circleColor
        }
    }

    @IBInspectable var textColor: UIColor = UIColor.
        darkGrayColor() {
        didSet {
            self.valueLabel.textColor = self.textColor
            self.unitLabel.textColor = self.textColor
        }
    }

    public var heartRate: Int? {
        didSet {
            if let heartRate = self.heartRate {
                self.valueLabel.text = "\(heartRate)"
                self.heartbeatTimer?.invalidate()
                if heartRate > 0 {
                    self.doHeartbeat()
                }
            }
            else {
                self.valueLabel.text = "--"
                self.heartbeatTimer?.invalidate()
            }
        }
```

I lied, here's another keyword

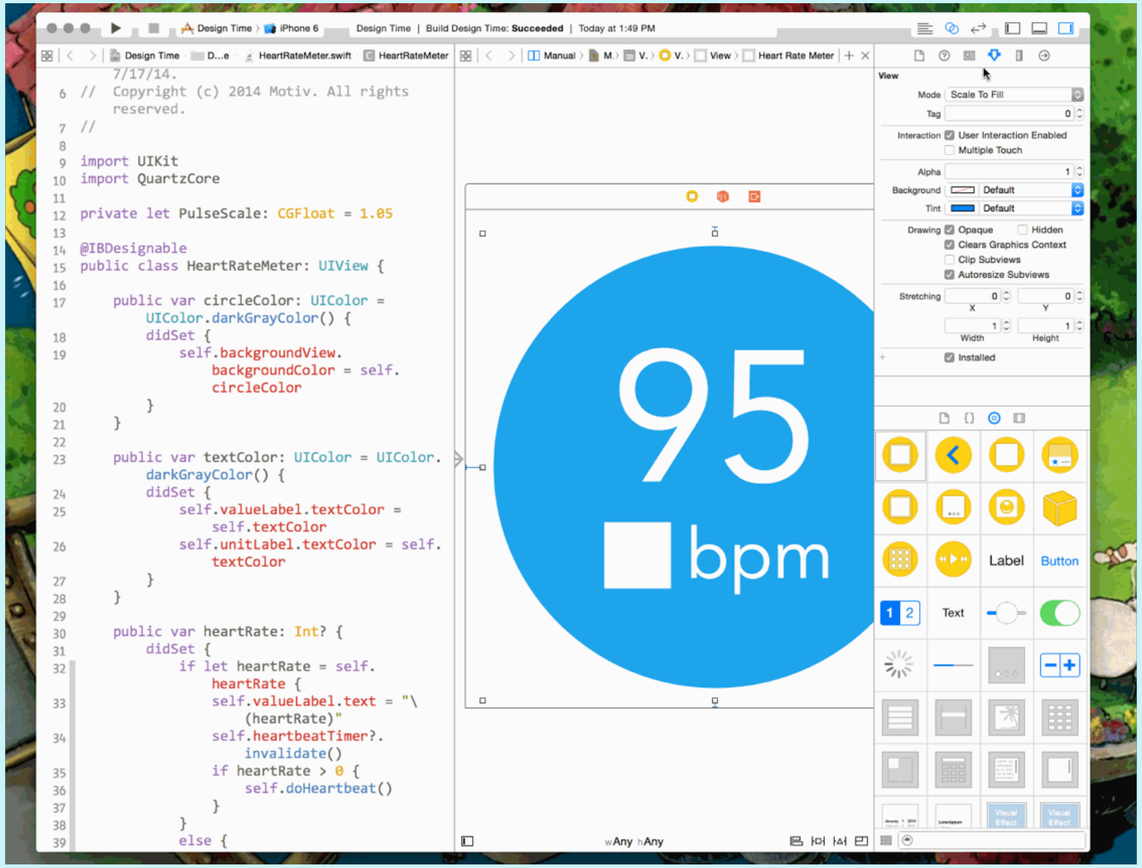
But in fairness it's not *necessary*

```
@IBDesignable
class HeartRateMeter: UIView {

  @IBInspectable var textColor: UIColor = UIColor.whiteColor() {
    didSet {
      // ...update the UI...
    }
  }

}
```

Automagically :



Craig-approved inspectable types

- ☞ Int/Float/Double
- ☞ String
- ☞ Bool
- ☞ CGPoint/CGSize/CGRect
- ☞ UIColor
- ☞ UIImage

How it works

① IB calls your view's `init(frame:)` method

☞ but it calls `init(coder:)` when running

② IB calls your view's `prepareForInterfaceBuilder()`

③ IB does the standard layout/drawing stuff

Providing test data for IB

```
override func prepareForInterfaceBuilder() {
  self.heartRate = 95
}
```

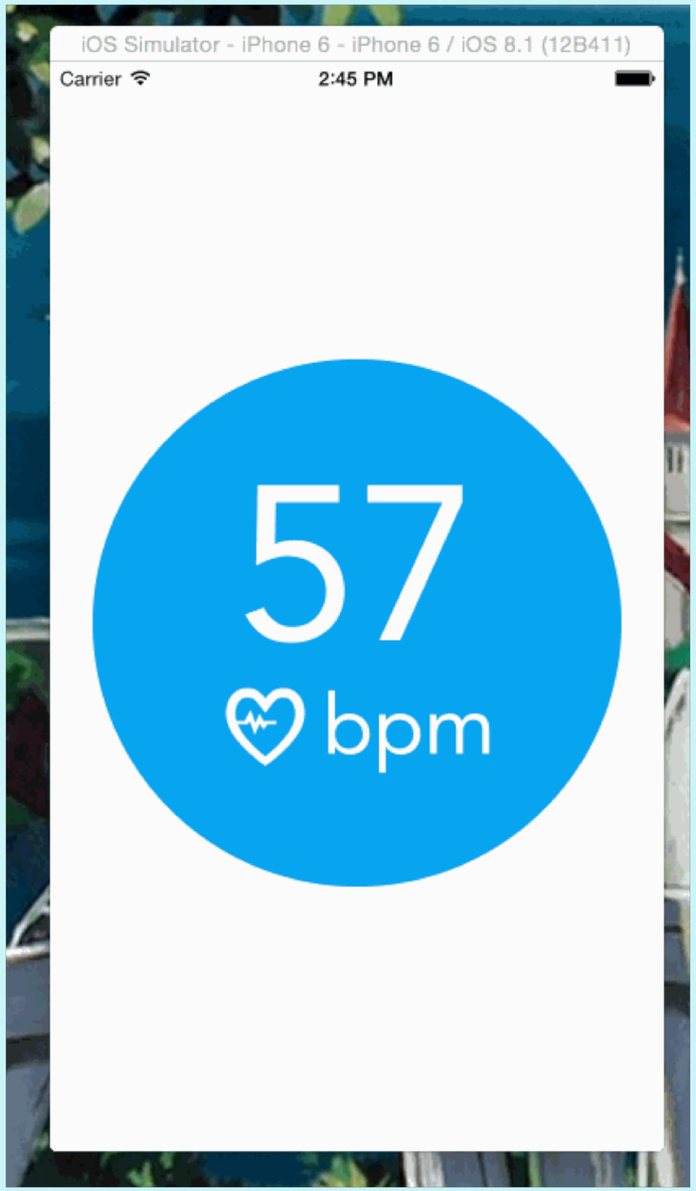
You could make the desired parameter inspectable, but that only works if it's one of the approved types.

Plus this is only executed when building in IB, and not when the app is run.

Caveat: Images won't work

Yep, that's a known issue.

```
override func prepareForInterfaceBuilder() {
  self.icon.backgroundColor = self.textColor
}
```



Questions?

This demo project and this talk at link.mrh.is/designtime.

I'll be around after the talks,
or find me at @mrh_is.