

# Apple Watch Development: The Bear Essentials

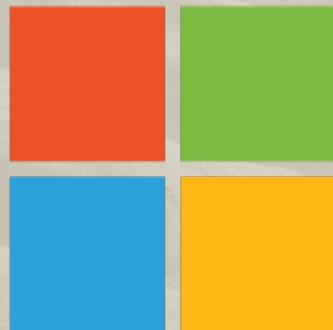
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**Matt Soucoup**  
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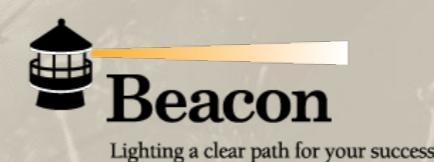
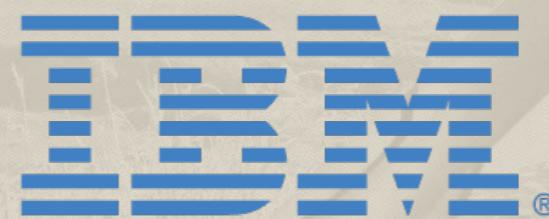




# Microsoft



**inrule**  
TECHNOLOGY®



# Matt Snyder



Independent Consultant

Madison, WI

20 Years  
Architecting Software  
and Systems

# Matt Soucoup



Developing watch apps  
since 2015

Xamarin Certified

Code Mill Technologies  
Madison, WI

# Mobile Dev User Group

[\*\*https://bit.ly/MSN-Mobile\*\*](https://bit.ly/MSN-Mobile)



@MSNMobileDev

# Xamarin Dev Days

<https://ti.to/xamarin/dev-days-madison>

## Xamarin Dev Days - Madison

📅 August 22nd, 2015  📍 Madison, WI

Xamarin Dev Days provide attendees with an intense, hands-on learning experience. Spend the morning exploring mobile development with sessions from Xamarin, our technology partners, and members of your local developer community, then roll up your sleeves for an afternoon dedicated to diving into code.

For a taste of the Xamarin community be sure to join your local [Madison Mobile .NET Developers Gorup](#) that meets regularly covering Xamarin and other Mobile topics! Be sure to check the Dev Days website as we will be adding more events soon.

### Tickets

**Xamarin Dev Days - Madison**      **free** [REGISTER](#)

Come learn Xamarin awesomeness with your community!

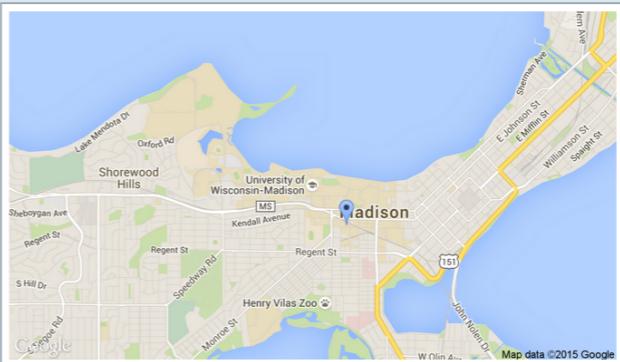
### Additional Information

Each Xamarin Dev Days is unique, but you'll always walk away with a better understanding of how you can build, test, and monitor native iOS, Android, and Windows apps with Xamarin.

### Local Agenda

Time	Session
8:30 - 9:00AM	Breakfast/Coffee + Registration
9:00 - 9:50AM	[Xamarin] Developing iOS & Android Apps in C#

**Venue**  
University of Wisconsin - Madison, 1210 W Dayton St.  
Madison, WI 53706



# On the Trail

**Watch  
Capabilities**



**Design  
Considerations**

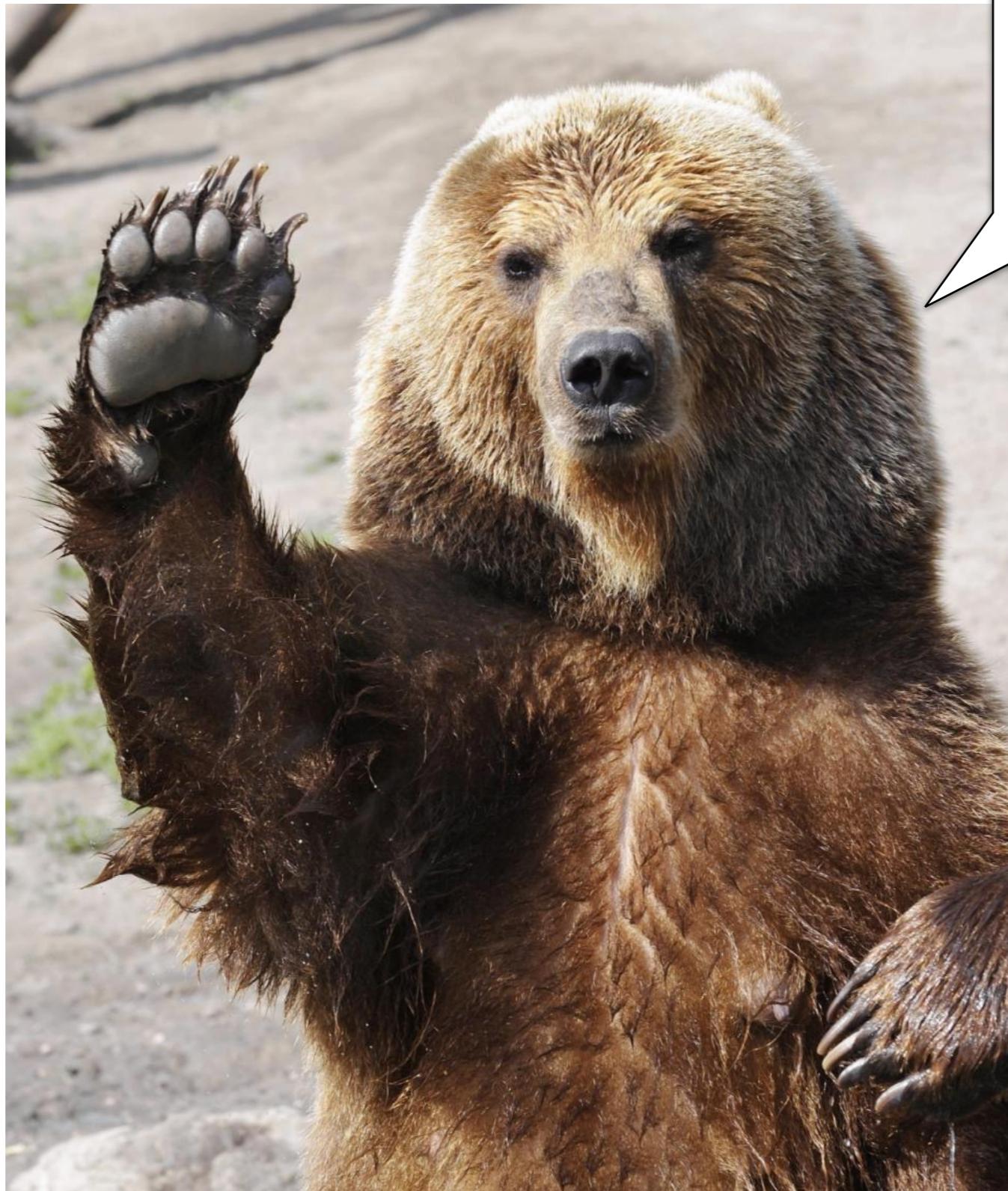


**Starting  
Development**



**More Demos**

# Participation



**Hey, I want  
a monkey!!!**

# Watch Hardware - Front



## Digital Crown

Spin to Navigate>Select  
Press - Go Home  
Double Press - Go Back

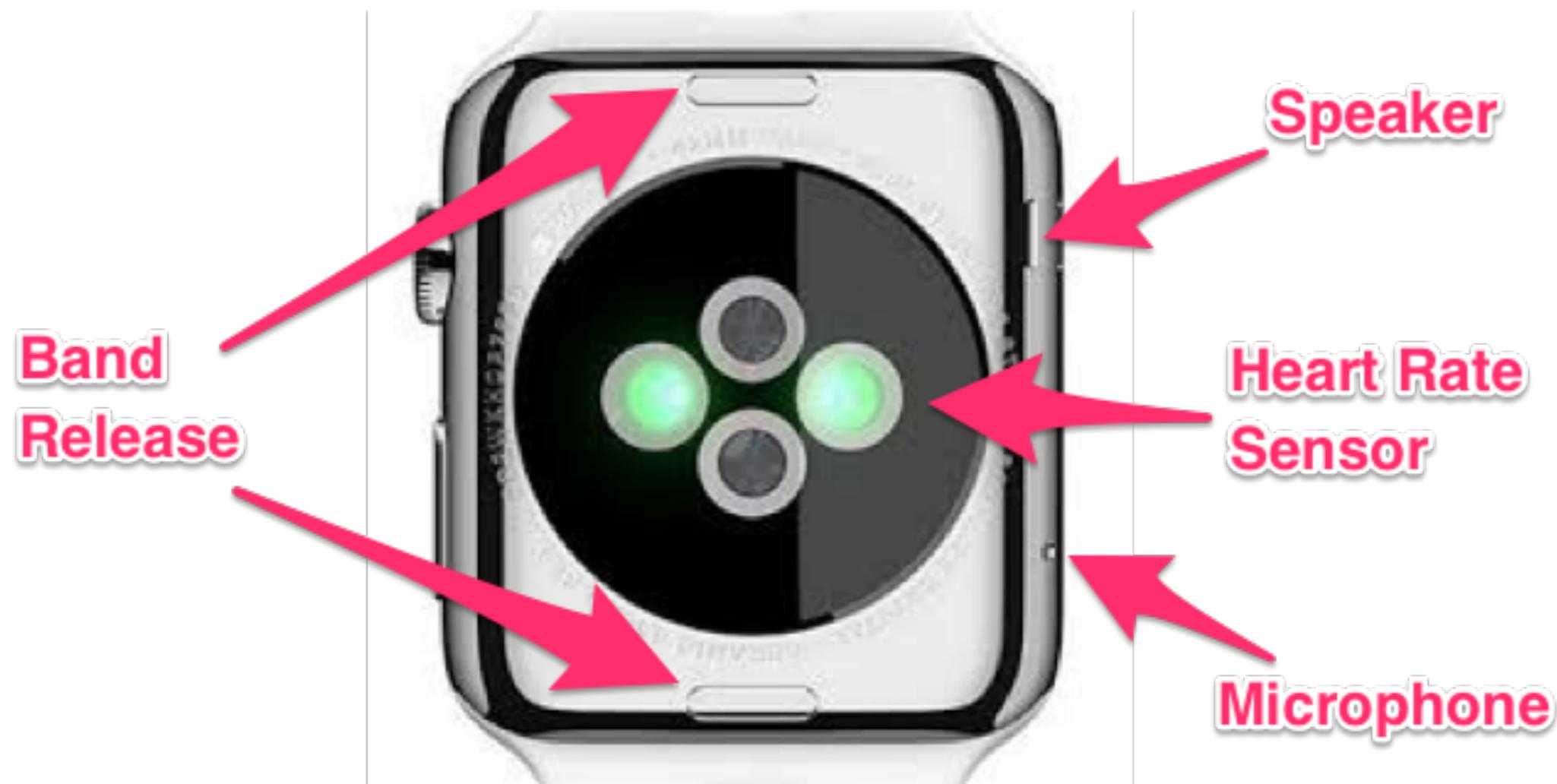
## Display

Tap and Swipe  
No pinch  
Force Touch

## Side Button

Power  
Double Press - Apple Pay

# Watch Hardware - Back



# Watch Hardware - Inside



**Accelerometer**

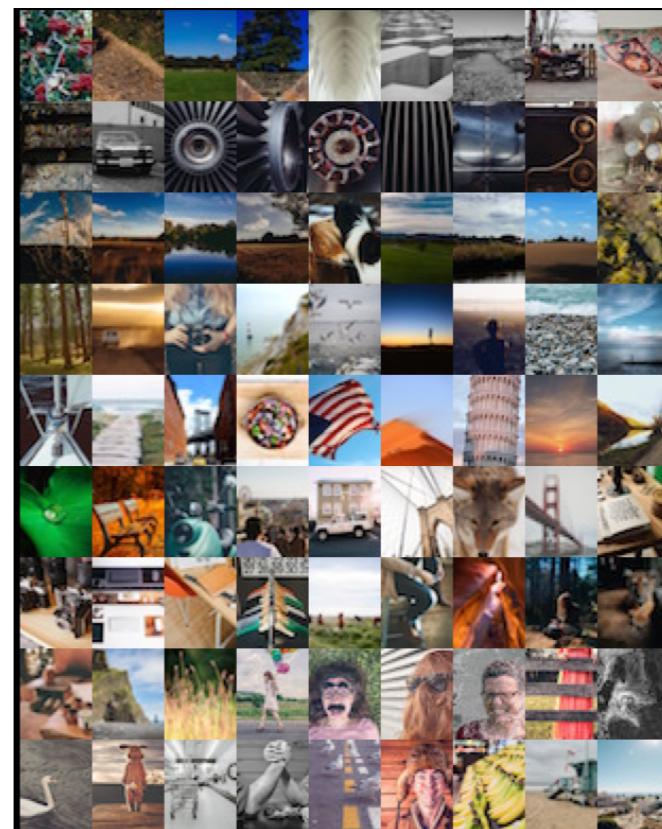
**Taptic Engine**

**Bluetooth**

**WiFi**

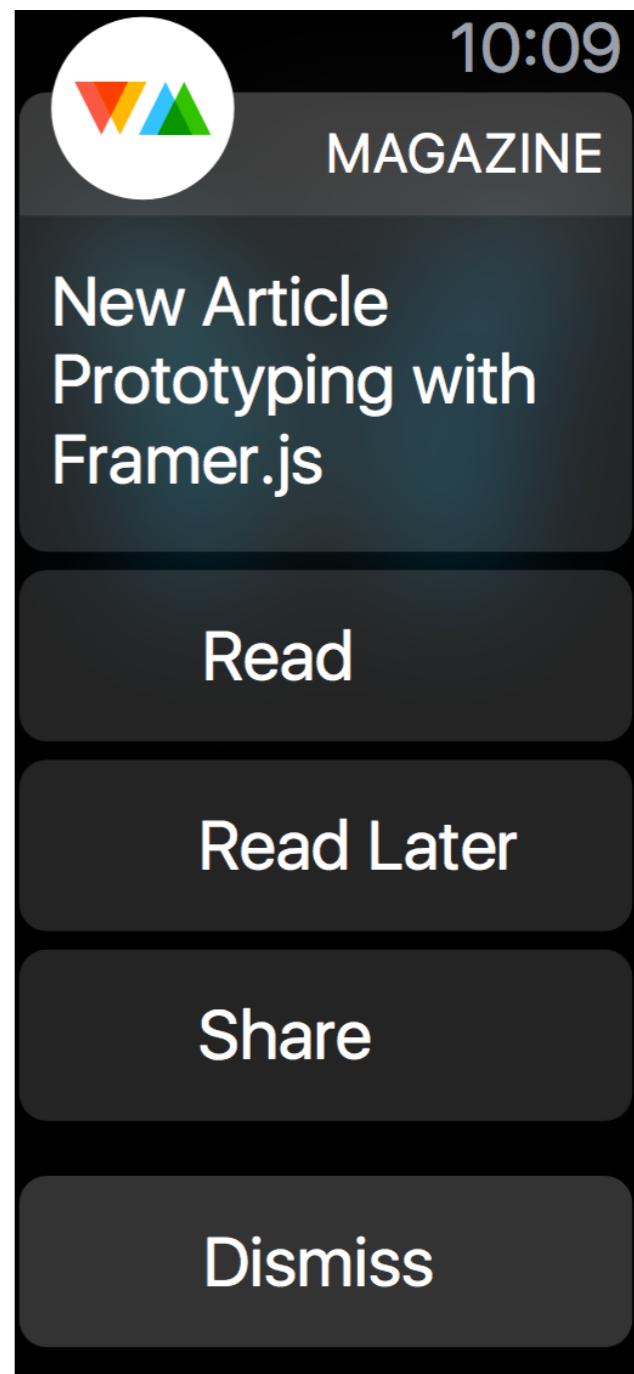
# Watch App Parts

## The App



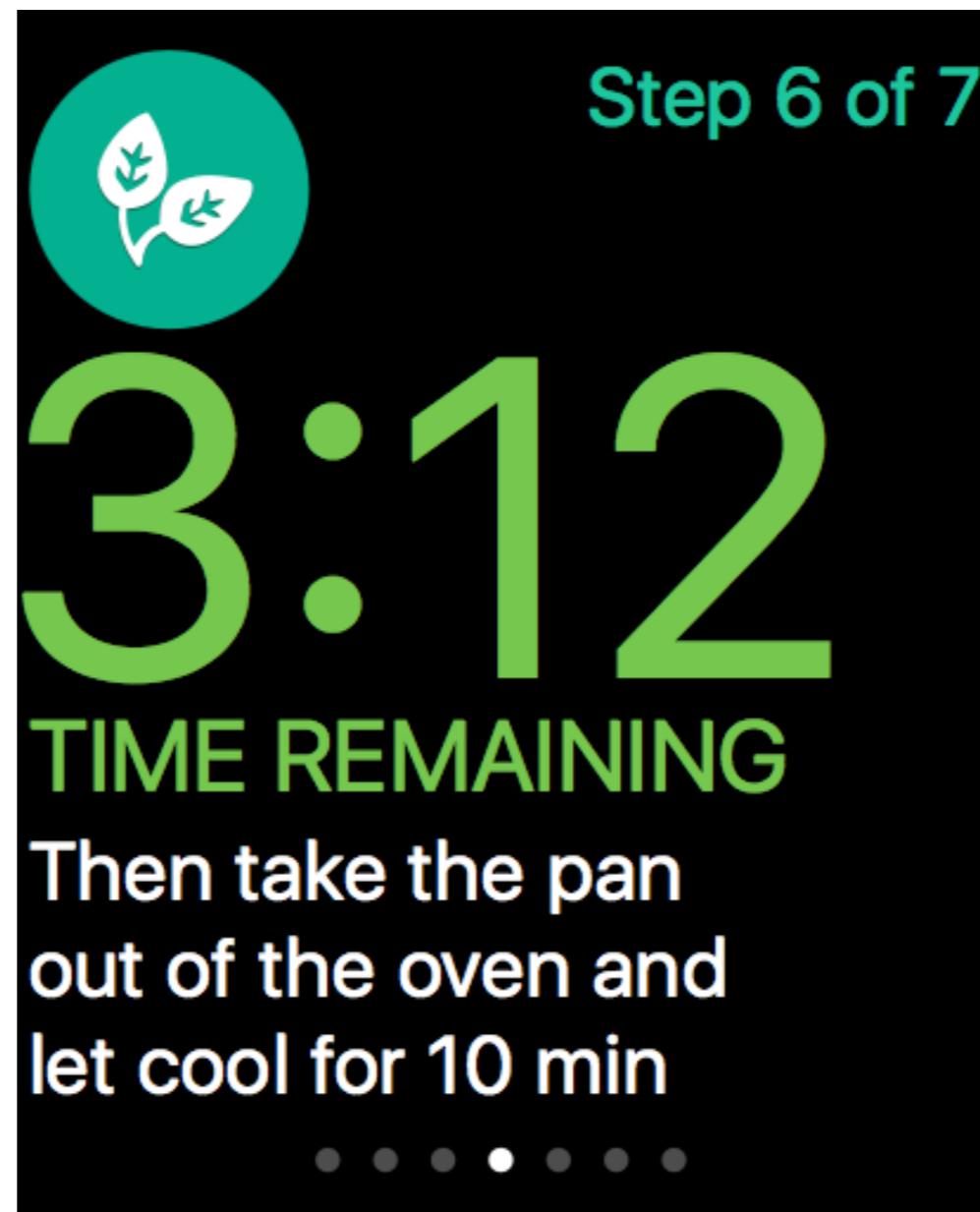
# Watch App Parts

## Notifications



# Watch App Parts

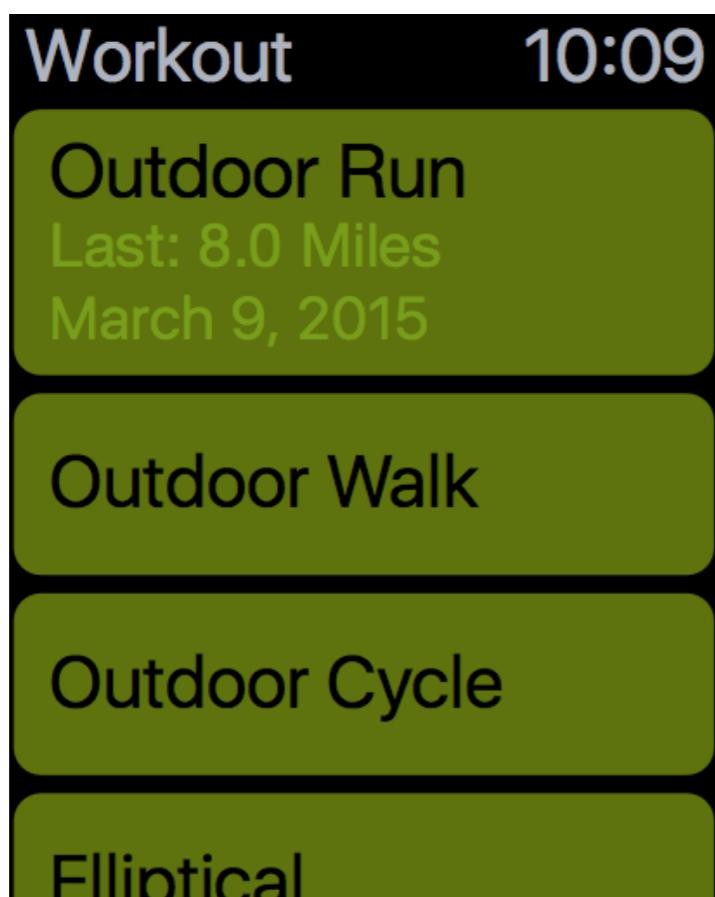
## Glances



# UI Design Considerations

## Distinct color palate

- Black background
- Neon/bright foreground



# UI Design Considerations

## Quick & easy to read

- Large fonts
- Fewer words
- Use images



# UI Design Considerations

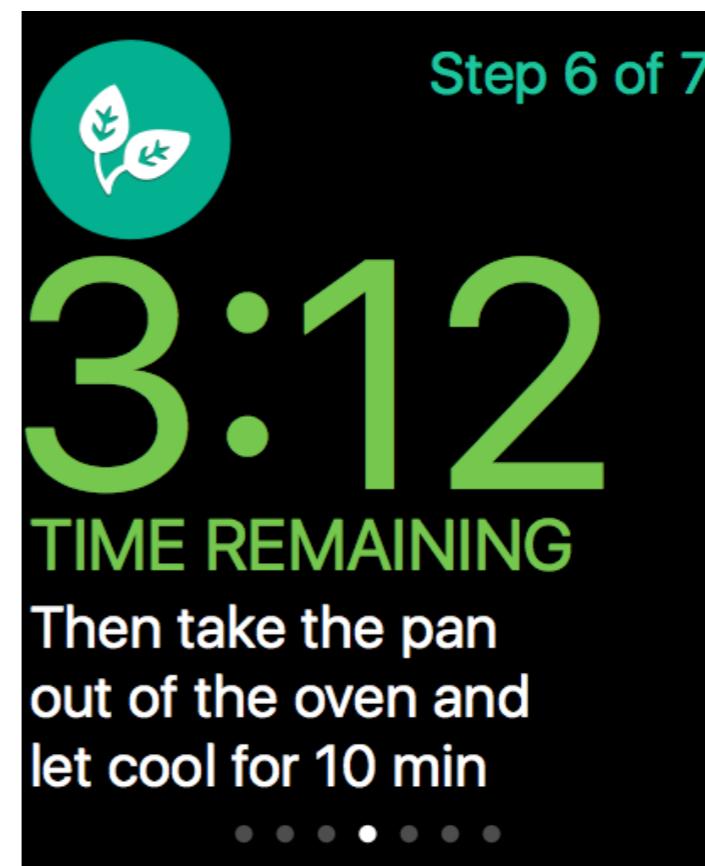
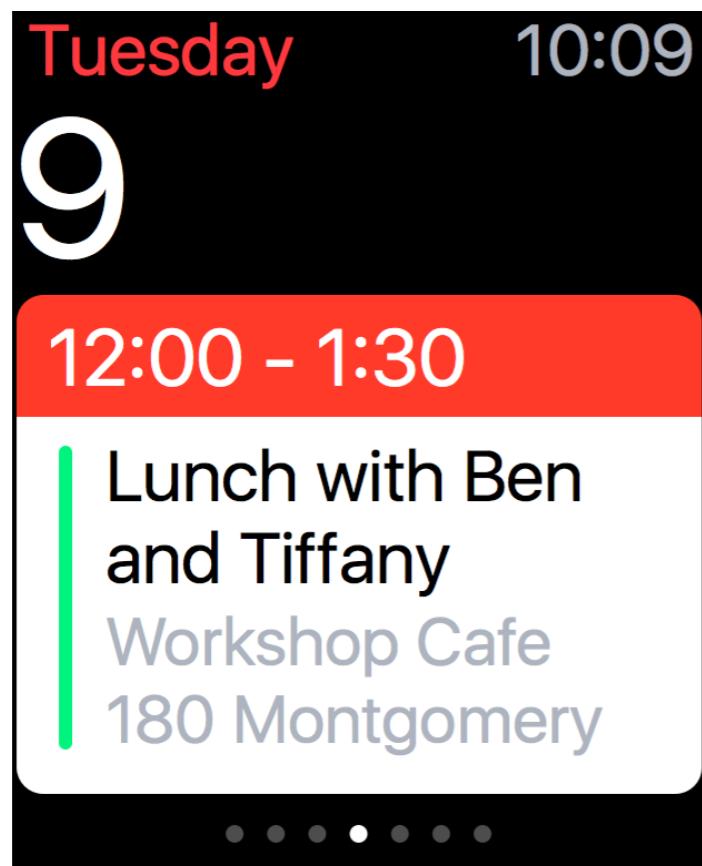
## **User wears the app**

- App as a natural extension of the hardware
- Easy to interact with
- Navigation metaphors that make sense

# UI Design Considerations

## Page Based Navigation

- Navigate between unrelated data



# UI Page Considerations

## List Based Navigation

- Navigate through hierarchical related data
- Master - Detail

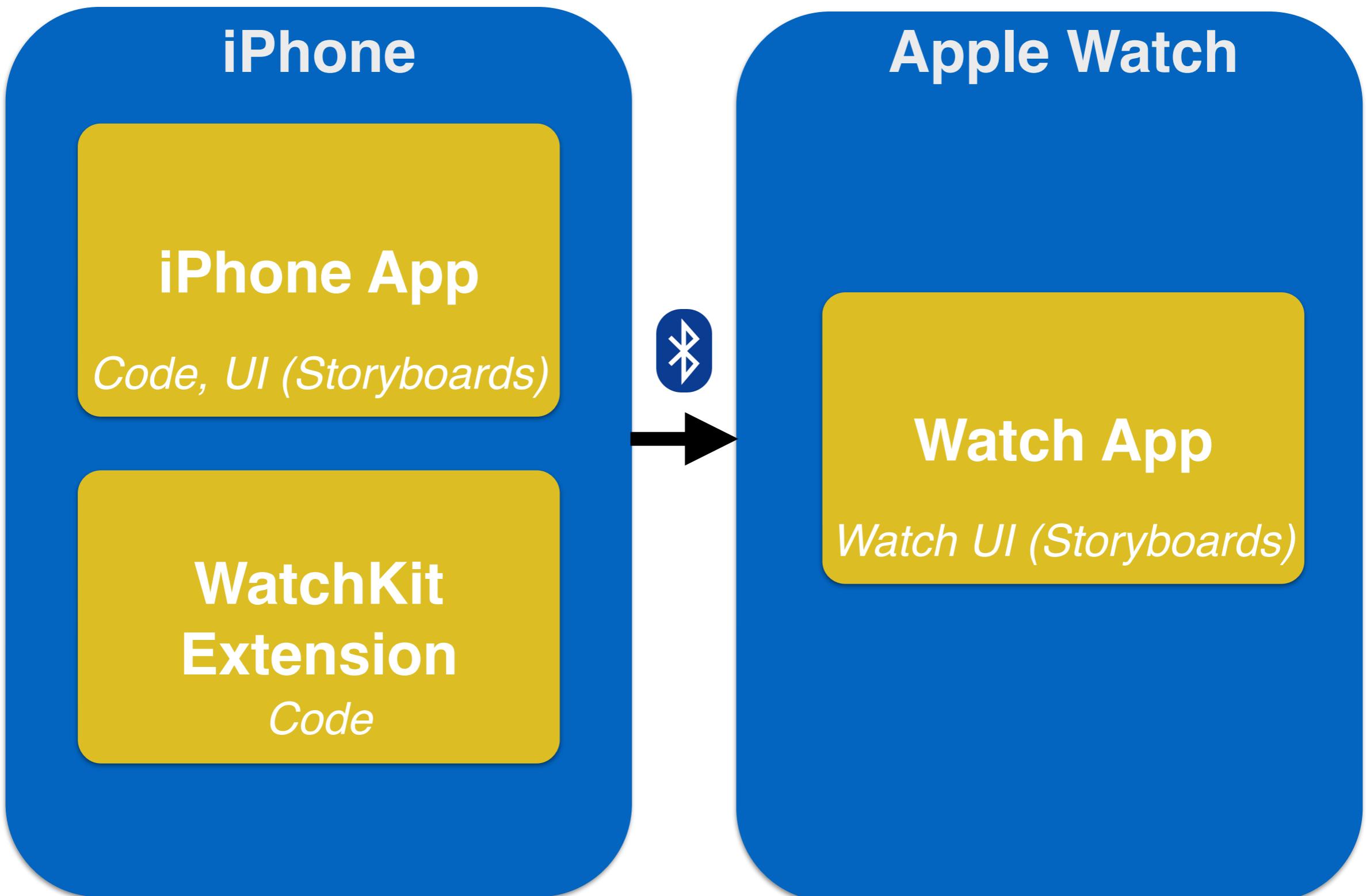
The screenshot shows a list of three events for 'Today, Sep 9'. Each event card has a colored vertical bar on the left: red for the top item, blue for the middle, and red for the bottom. The first event is 'Lunch with Ben' at 10:09, with details 'Tuesday, Sep 9' and '12:00 PM - 1:30 PM'. The second event is 'Fall project briefing' at 10:09, with details 'Tuesday, Sep 9' and '3:00 PM - 4:00 PM'. The third event is 'Minimum Inc' at 10:09, with details 'Tuesday, Sep 9'.

Event	Date	Time
Lunch with Ben	Tuesday, Sep 9	10:09
Fall project briefing	Tuesday, Sep 9	10:09
Minimum Inc	Tuesday, Sep 9	10:09

The screenshot shows a list of four workout activities under the heading 'Workout' at 10:09. Each activity card is green. The first activity is 'Outdoor Run' with details 'Last: 8.0 Miles' and 'March 9, 2015'. The second activity is 'Outdoor Walk'. The third activity is 'Outdoor Cycle'. The fourth activity is 'Elliptical'.

Activity	Details
Outdoor Run	Last: 8.0 Miles March 9, 2015
Outdoor Walk	
Outdoor Cycle	
Elliptical	

# Watch Architecture



# Performance Considerations

## Not a mini iPhone

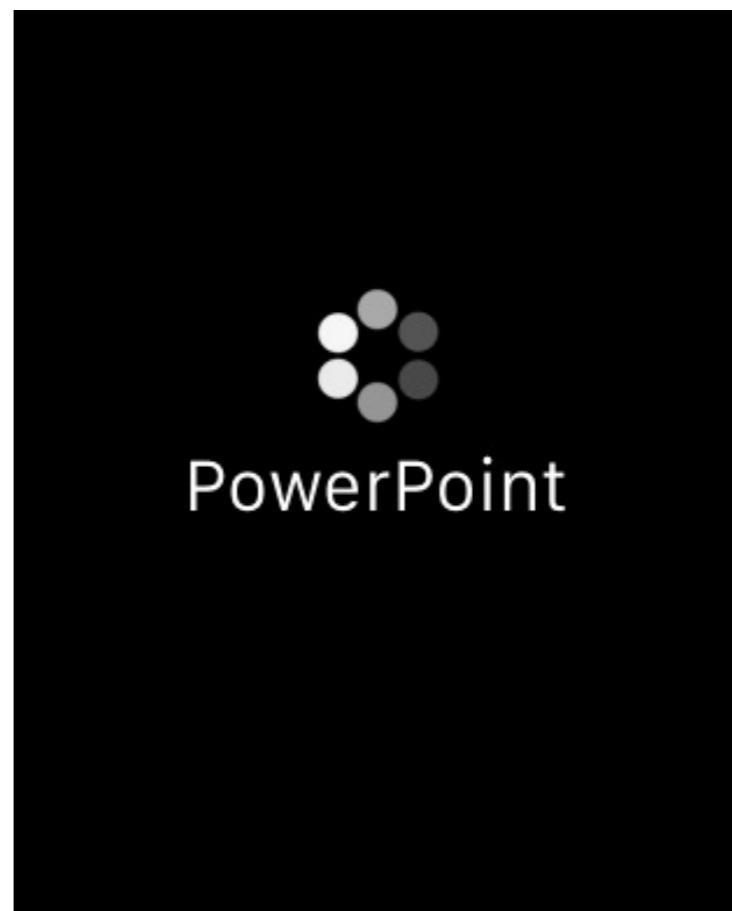
- Strip out the unnecessary
- Companion/add-on to iPhone app



# Performance Considerations

## **Don't make them wait**

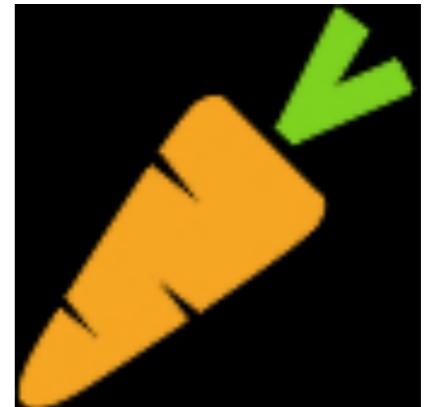
- Minimize startup time
- Progressive loading



# Performance Considerations

## Graphic size matters

- Use compression
- Smaller color palate
- No transparency



**uiDemo();**

# Dev Machine Setup

**Computer running MacOS**

**Xcode 6.3 (includes iOS 8.3 SDK)**

**Xamarin Studio (if C#)**

```
helloWatchDemo() ;  
iotDemo() ;
```

# Slides, Code, and More

<https://github.com/snydercoder/ThatWatchTalk>

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