

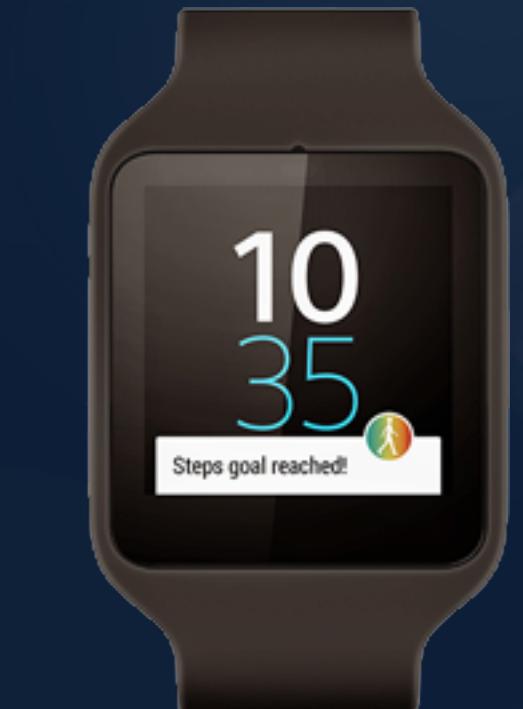
A portrait of a man with short brown hair, smiling, wearing a dark hoodie over a blue t-shirt. He is positioned on the left side of the slide, with a blue diagonal stripe separating him from the text area.

Wear C#  
on your  
Wrist!

Jonathan Dick  
<http://redth.codes>  
@redth



# Wearables

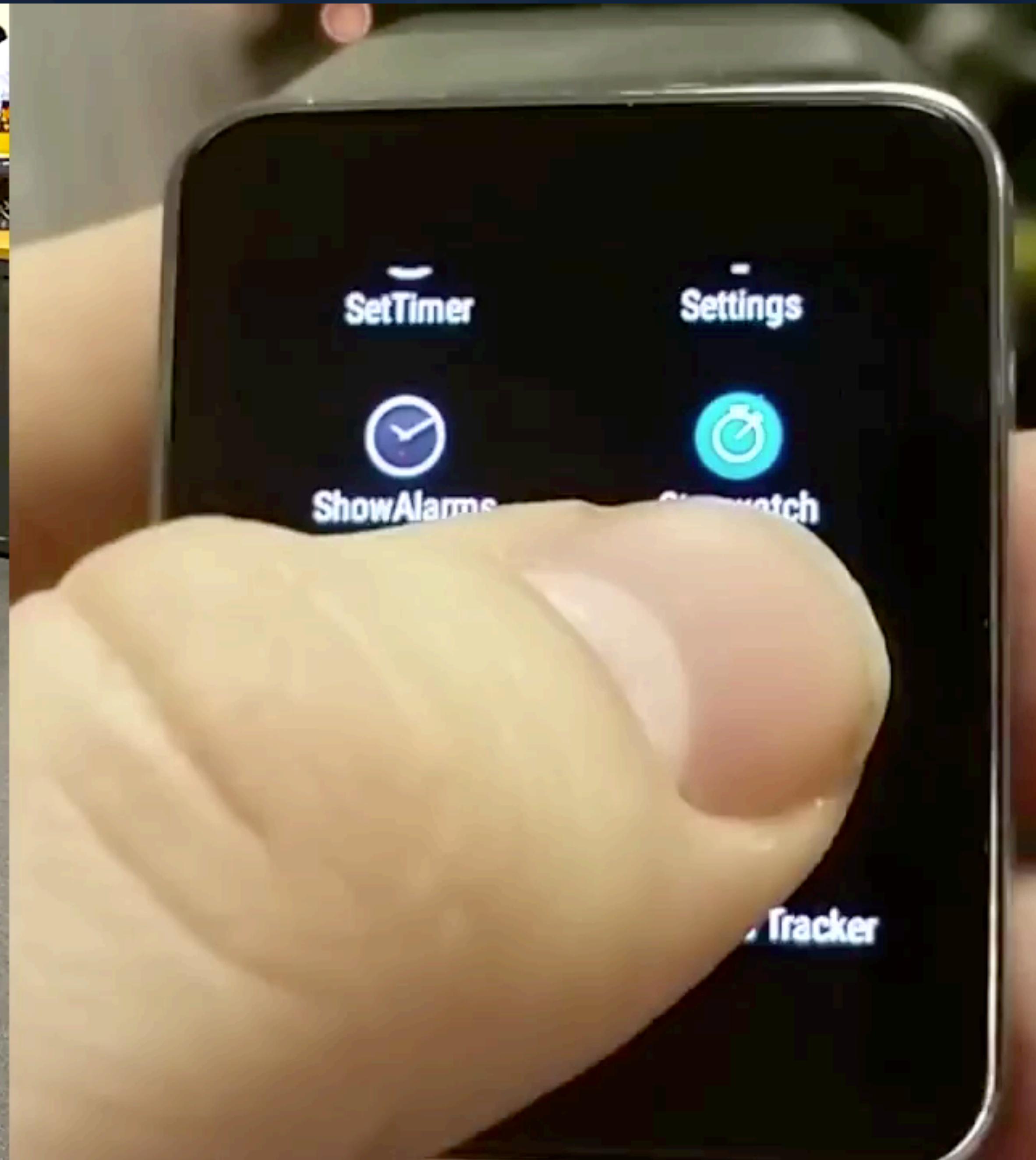


# Android Wear

# What is Wear?

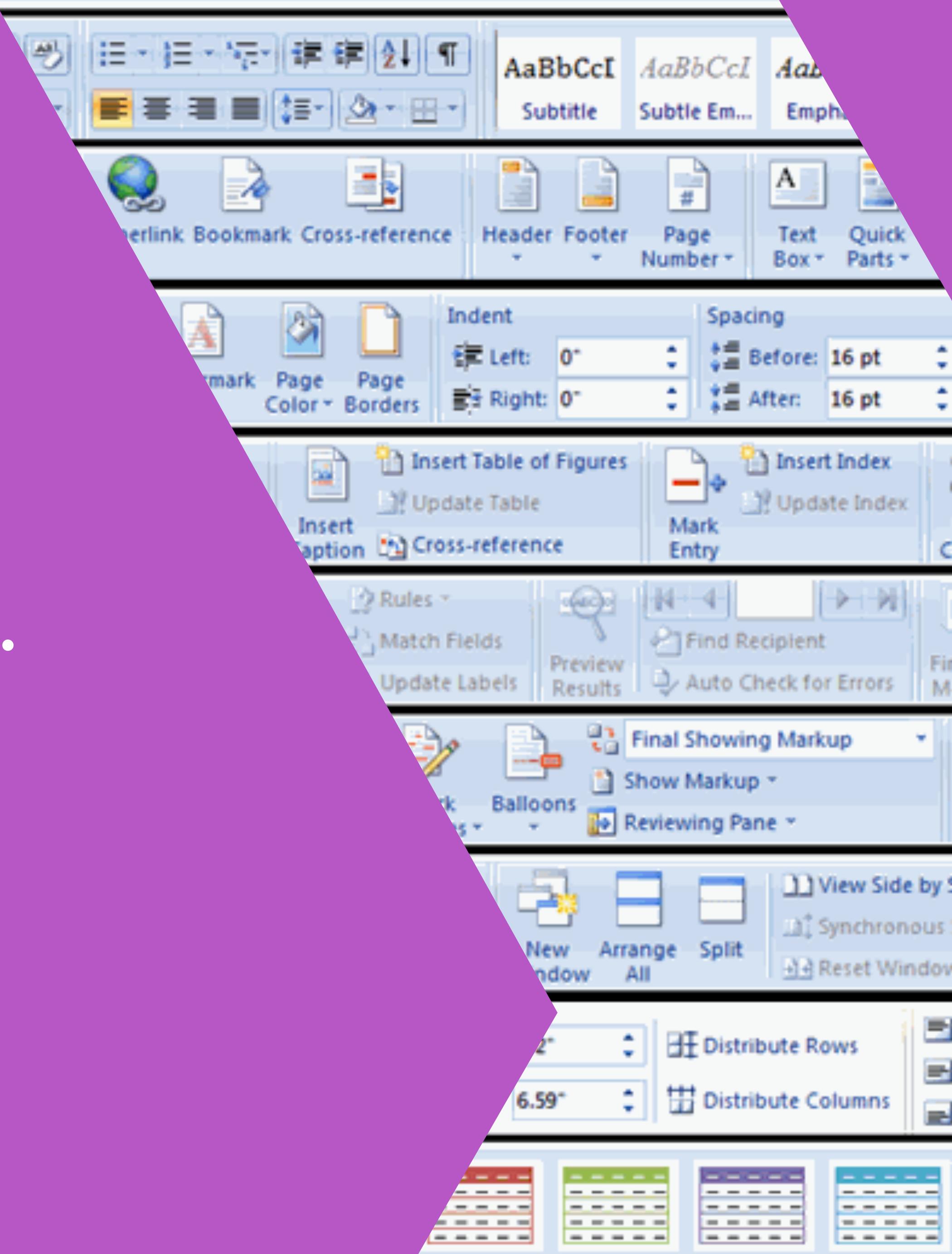
- Android 4.4.87
- Paired to Phone
- Companion Apps
- Sensors





# Wearable App Design

Just because you can...



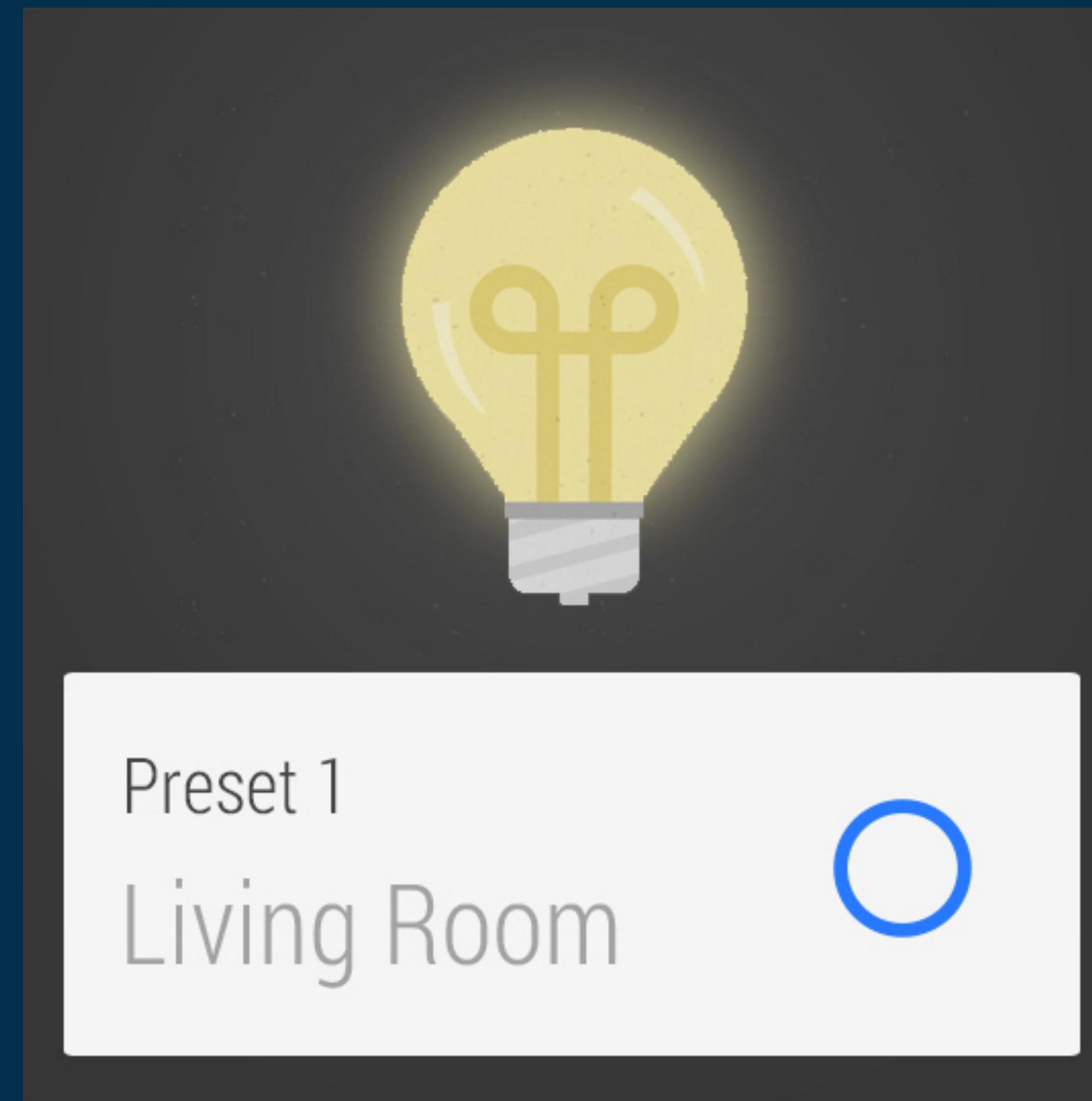
doesn't mean you should.



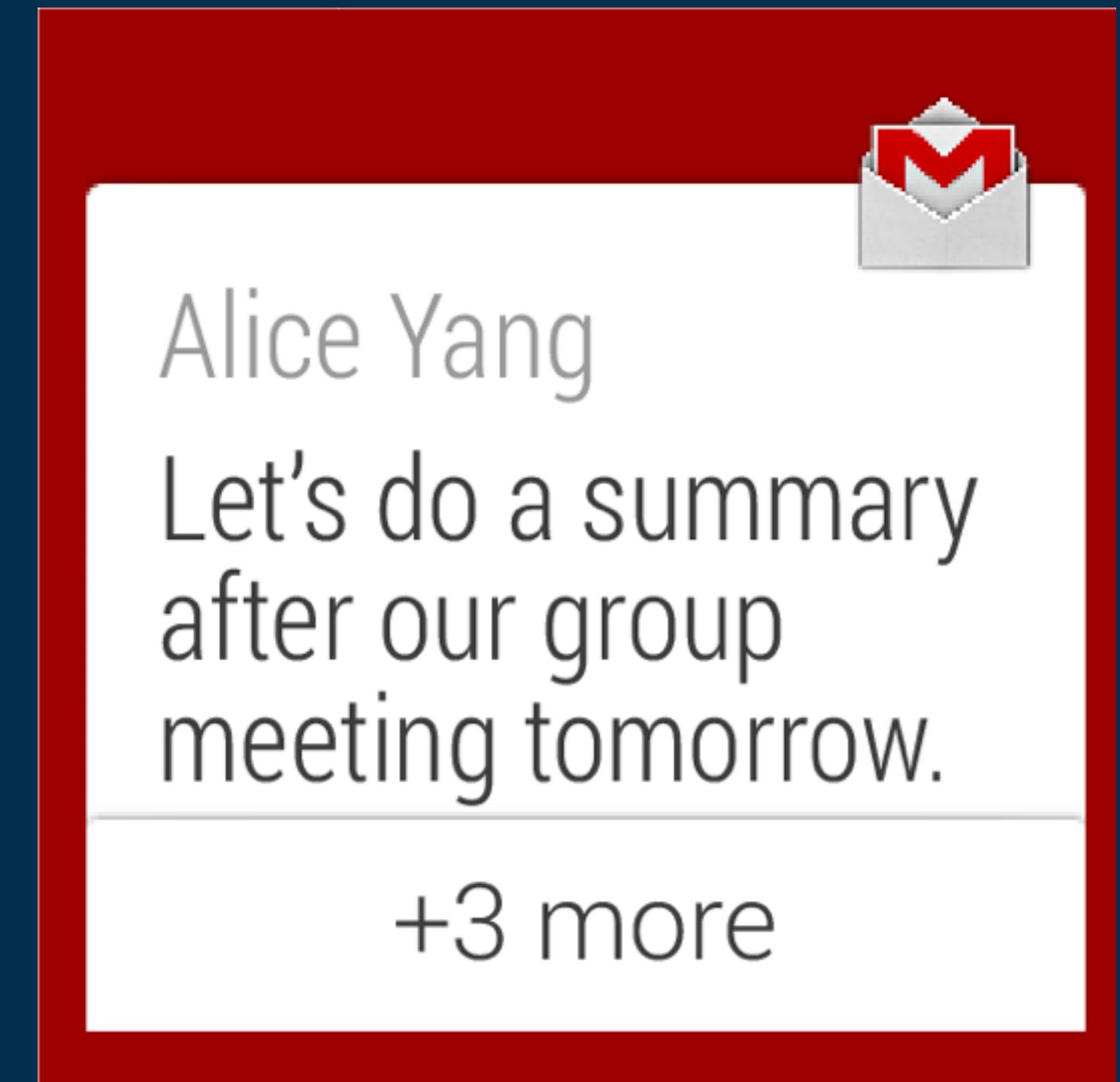
# Cards



Standard Card



Single Action Card

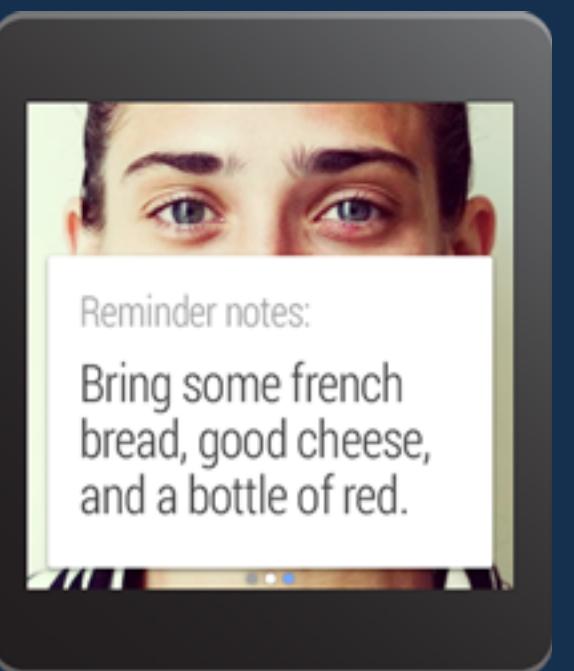
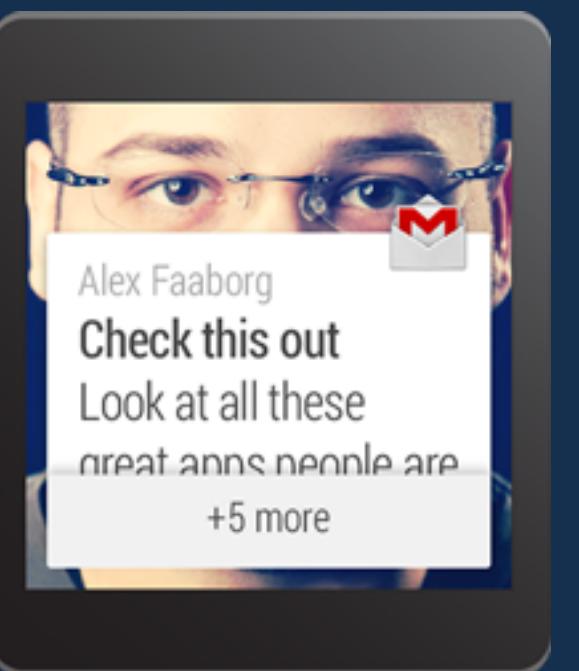
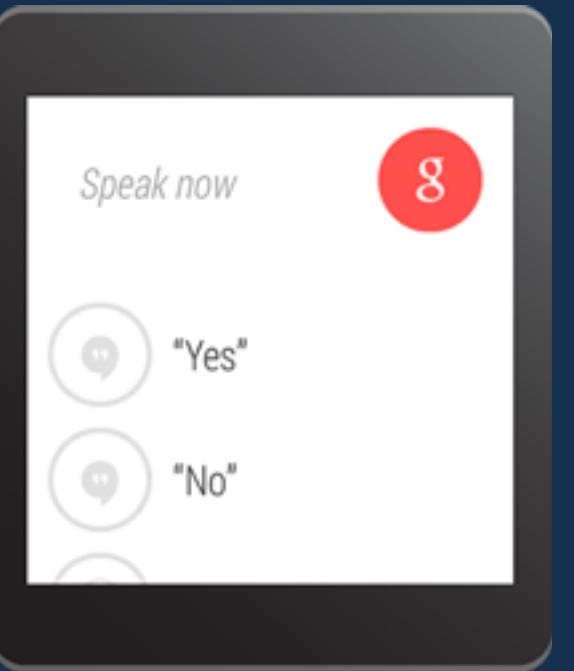
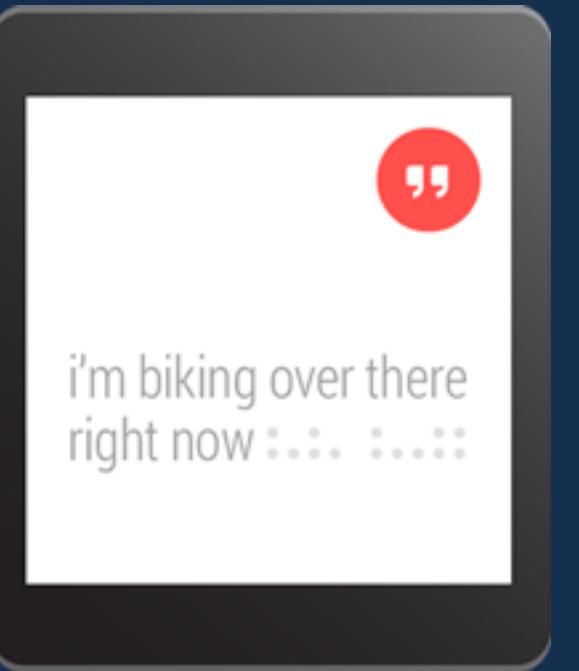
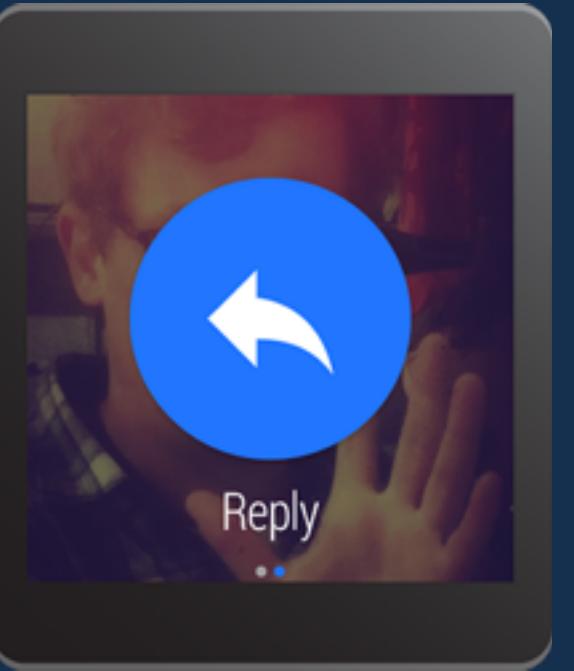
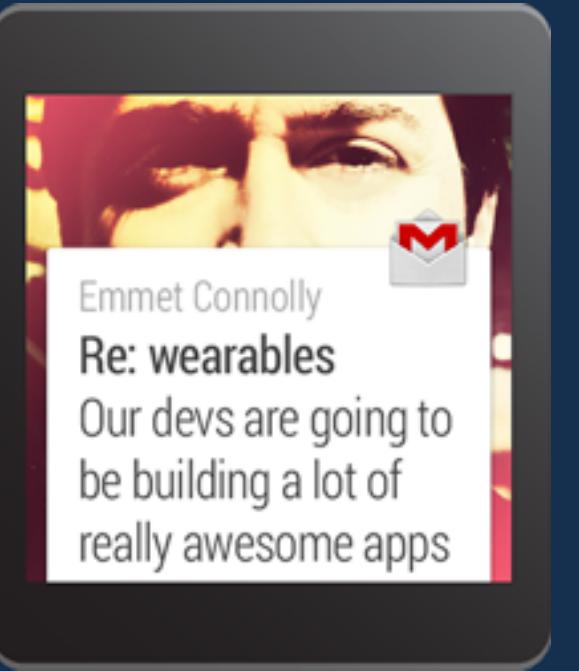


Stacked Card

# Extending your existing app's Notifications

Lazy, but **very effective!**

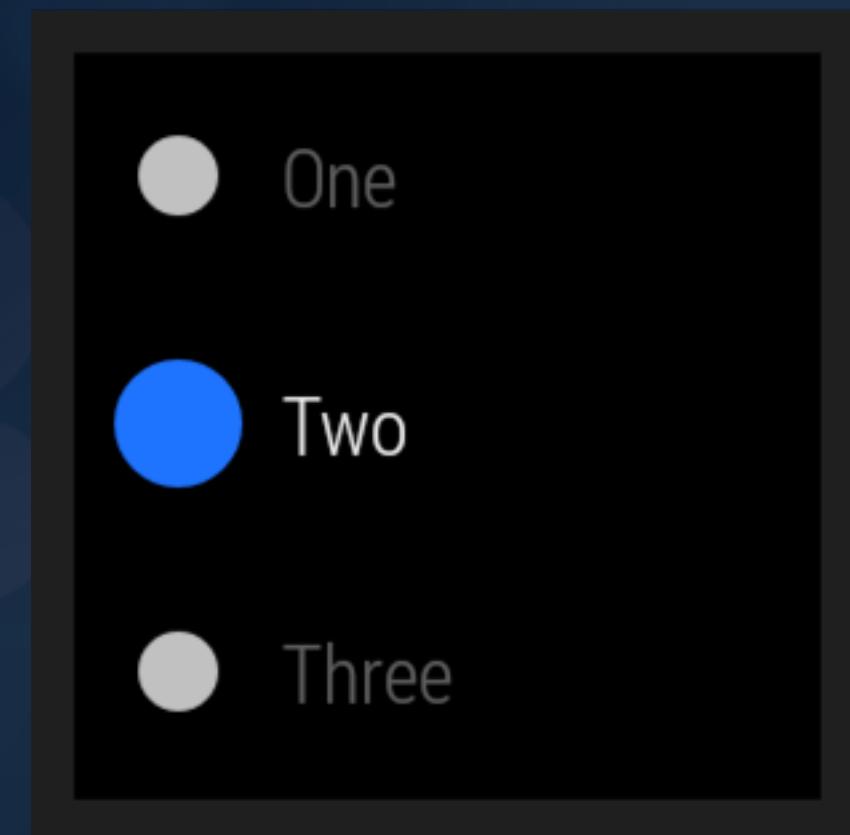
- Uses Notification.***WearableExtender***
- Custom Backgrounds
- Add *actions* to your Notification
- Remote Input
  - Voice Input
  - Predefined actions
- Pages
- Stacking



# Demo

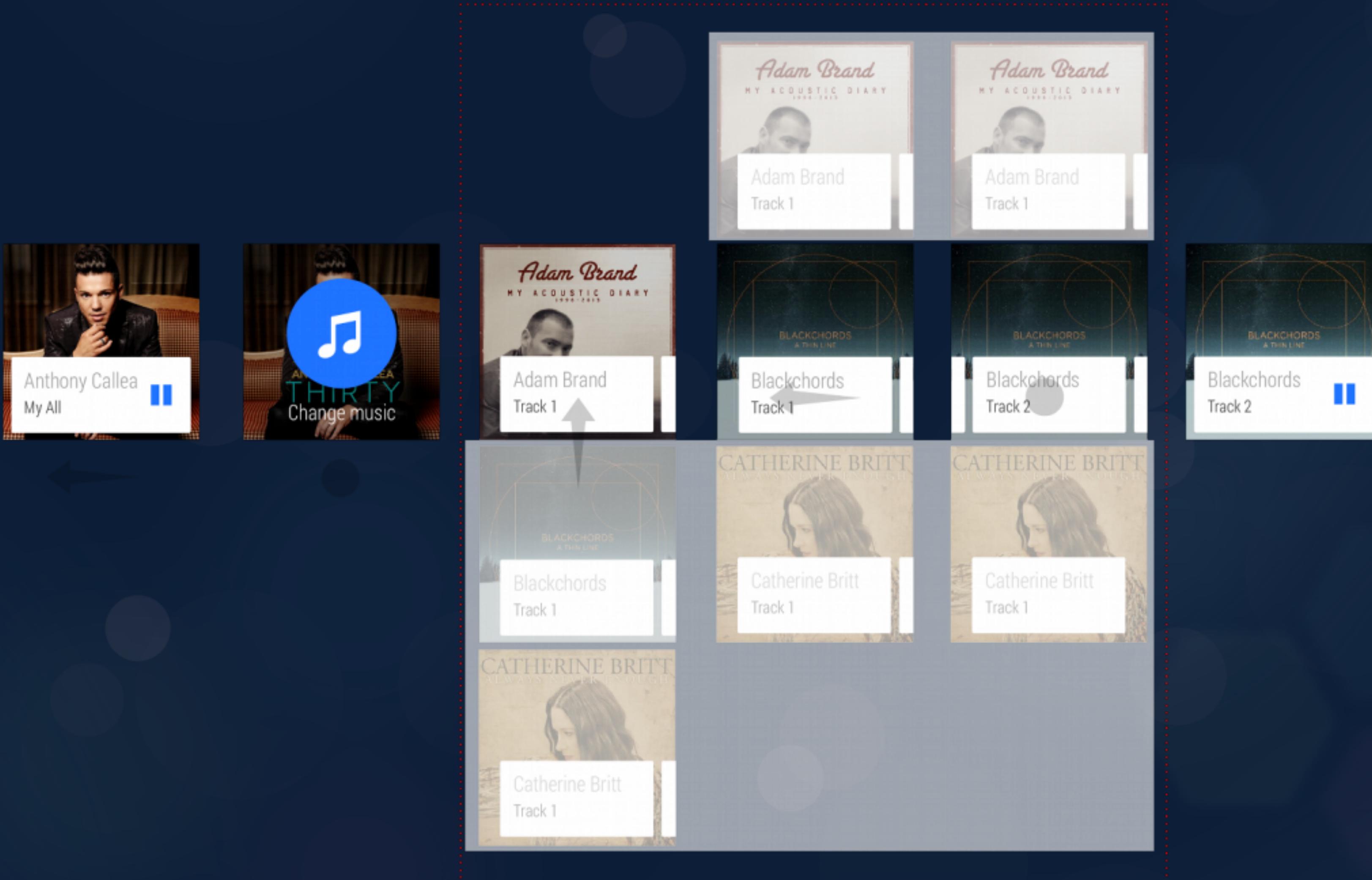
# Lists

- **WearableListView**
- **Special RecyclerView**



# Demo

# GridViewPager



# Demo

# Communication



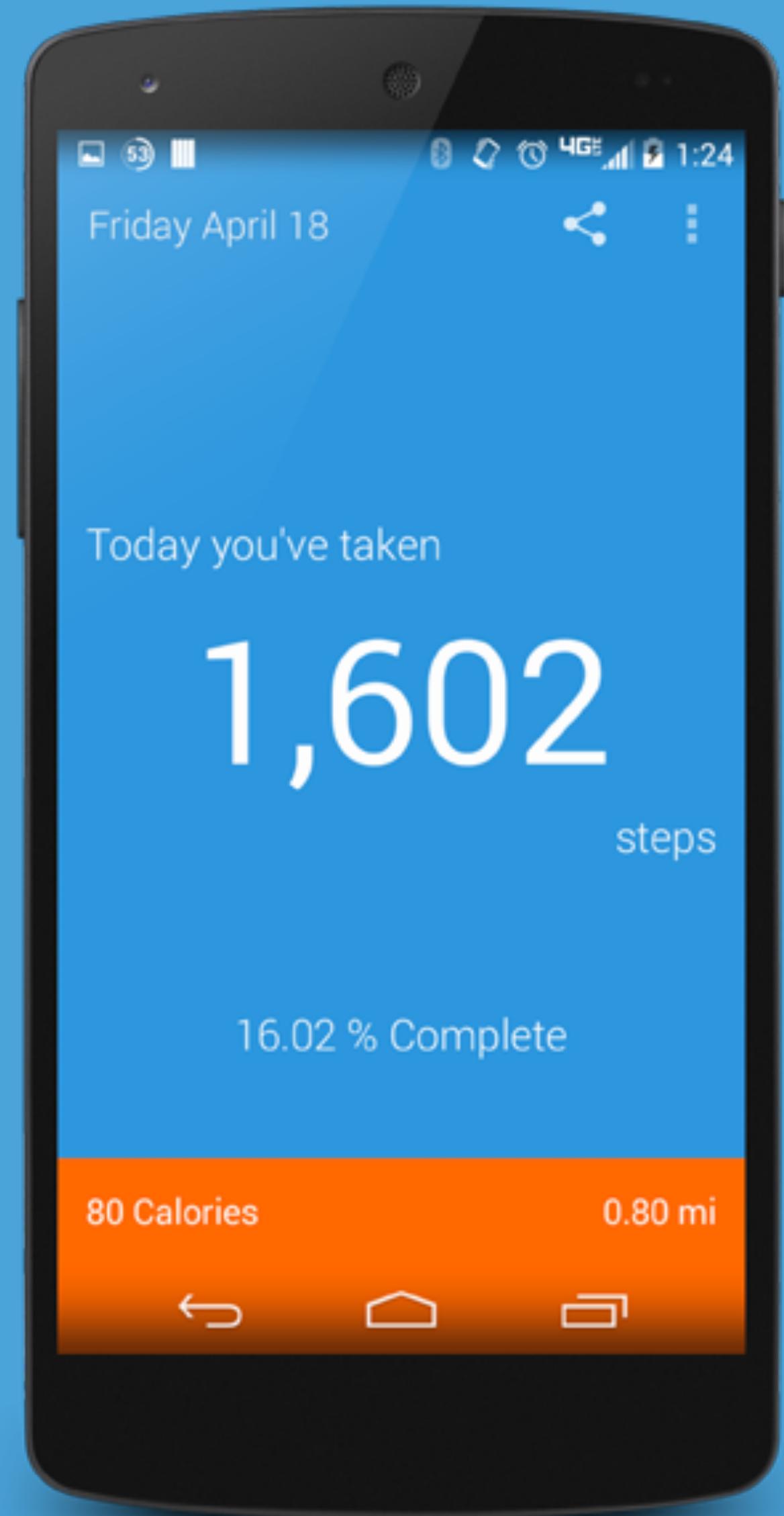
MessageApi

DataApi

# Demo

# Sensors

- Use Standard Sensor API's on Android
  - Accelerometer
  - Digital Compass
  - Gyroscope
  - Heart Rate Monitor
  - Step Counter



# Demo

# Packaging

- Wear apps do not exist on their own
- Embedded inside 'Companion' apps
- Signed with same keystore
- Wear app's .APK file embedded as Asset
- Resource XML points to .APK

# Custom Watch Faces

- Wallpaper Service
- OnDraw (Canvas)
- Still an embedded app
- Ambient Mode / Visibility changes



# Apple Watch



# Architecture

- WatchKit Extension
  - Runs on Phone
  - Storyboard / UI
  - Published to Watch



Xamarin Support coming soon!

# THANKS!