Introduction to

and wear

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About Me



- 4+ years developing Android apps
- Atomic Robot cofounder and Android lead
- Husband, dad, geek, foodie, BBQer

Outline

- What is Android Wear
- Getting setup
- Capabilities
- Code and demo
- Discussion

Disclaimer

- Warning: prepare for jumping between the presentation, code, demos, etc.
 Take your Dramamine now!
- Details presented tonight are likely to change after Google I/O.

What is Android Wear?



https://www.youtube.com/watch?v=QrqZl2Qlz0c

What is Android Wear

"Android Wear extends the Android platform to a new generation of wearable devices. The user experience is designed specifically for wearables."

What is Android Wear

- Leverages old APIs, introduces new APIs
- New design guidelines and challenges
 - Square and round screens!
- Expect lots of attention at Google I/O

Incredibly easy to optimize your apps for Android Wear!

What is Android Wear

Announced devices (not exhaustive)



Moto 360

moto360.motorola.com

LG G Watch

lg.com/global/gwatch



Getting setup

Getting setup: Requirements

- Physical Android device running 4.3 or later with USB debugging turned on
- Sign up for the Developer Preview at developer.android.com/wear
 - Within 24 hours (frequently much less) you'll receive a confirmation email with:
 - Link to download samples
 - Link to download the Wear Preview app

Getting setup: Install SDK packages

- Through the Android SDK Manager
 - Android Wear System Image
 - Android SDK Tools (latest version)
 - Android Support Library (latest version)
 - Android Support Repository (latest version)

Getting setup: Emulator

- Currently no physical devices for testing
- Setup a new emulator
 - Note: Currently no HAXM support

Getting setup: Emulator

| 000 | Create new Android Virtual Device (AVD) |
|--|---|
| AVD Name: | round_wear |
| Device: | Android Wear Round (320 × 320: hdpi) ‡ |
| Target: | Android 4.4.2 - API Level 19 \$ |
| CPU/ABI: | Android Wear ARM (armeabi-v7a) ‡ |
| Keyboard: | ☑ Hardware keyboard present |
| Skin: | AndroidWearRound \$ |
| Front Camera: | None ‡ |
| Back Camera: | None ÷ |
| Memory Options: | RAM: S12 VM Heap: 32 |
| Internal Storage: | 200 MiB ‡ |
| SD Card: | • Size: MiB ÷ File: Browse |
| | |
| Emulation Options: | ✓ Snapshot Use Host GPU |
| Override the existing AVD with the same name | |
| | Cancel OK |

Getting setup: Pairing

- Start the emulator and plug in your device
 - Should be the only devices connected to ADB!
- Device: Open the Android Wear Preview app
 - First time: follow the prompts to turn on notification access for the Android Wear Preview app.
- ADB port forwarding:

```
adb -d forward tcp: 5601 tcp: 5601 (Keep this handy, you'll run it often...)
```

Capabilities

Capabilities

- Still in Developer Preview so not all features exist yet
- Do NOT ship your app with the Developer Preview. It is not supported and your app will break (likely soon).

Capabilities: Existing

- Your app's notifications will automatically show up on paired Android Wear devices!
 - Wear: extra content pages
 - Wear: voice reply and quick reply actions
 - Wear: stackable notifications
 - App: Custom layout notifications or notifications with RemoteViews are stripped.
- Easily extend app and device capabilities

Capabilities: Coming Soon

- Support for custom UI
- Device/wearable communication
- Sensors (heart rate monitor?)
- Voice actions ("Ok Google, ...")
- ???

Code and demo

Code and demo

- Imports
 - Use the Developer Preview imports
 - Make sure to use NotificationCompat
- Unmodified app
- Notification pages
- Quick reply actions

Resources

- Developer site: <u>developer.android.com/wear</u>
- Wear DevBytes YouTube channel: goo.gl/pZZkLt
- G+ Android Wear Developers Community: goo.gl/KsJSkC
- Wear notification cheat sheet: goo.gl/uk0Ks1

Discussion

For your convenience...

Get the presentation and any code here:

https://github.com/patrickhammond/ Presentation-IntroductionToAndroidWear





Questions?

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