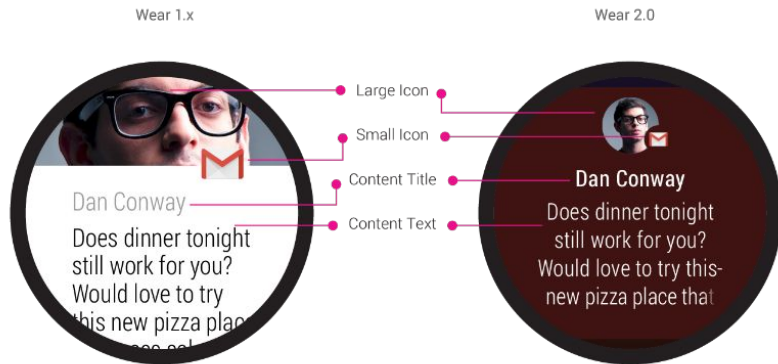


# ANDROID WEAR 2.0 & WATCHFACES

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# NEW FEATURES IN AW 2.0

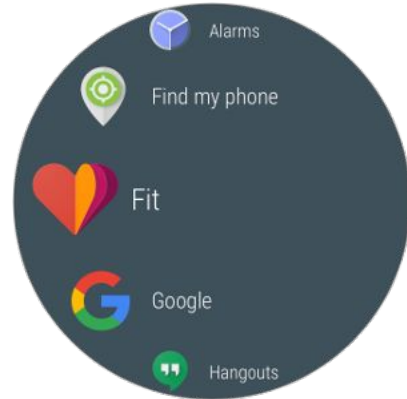
- Different navigation, digital crown support
- Google assistant
- Different notification style, dark UI
- LTE, NFC, GPS support
- Better and more powerful standalone apps
- Keyboard input, better messaging
- Better capabilities with iPhones



# NEW UI ELEMENTS, API

## WearableRecyclerView

- For longer lists
- Customizable
- Fits square and circle watches



## New input methods

- You can create custom input method
- Not supported when paired with iPhone



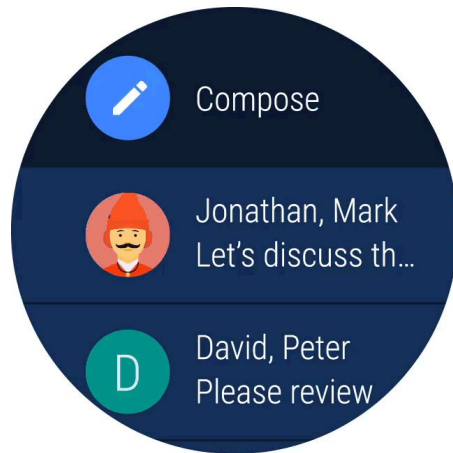
# NEW UI ELEMENTS, API

## NavigationDrawer

- Used for navigation in more complex apps
- Equivalent of navigation drawer on phones
- Pretty customizable

## ActionDrawer

- Shown when list is scrolled to top or bottom
- Equivalent of action bar or overflow menu
- Both need WearableDrawerLayout as root layout



# REQUIRED CHANGES

- minSdkVersion 23+ & runtime permissions model.
- **<uses-feature android:name="android.hardware.type.watch"/>** in manifest
- **<meta-data android:name="com.google.android.wearable.standalone" android:value="true"/>** so it can run when paired with iPhones too
- Upload your APKs via multi-APK using the Play Developer Console.

# EXCEPTION WEAR

- Supports all crash logging services
- <https://github.com/tajchert/ExceptionWear>

MeetupWatchface  
has stopped



Open app  
again

# WATCHFACES

- Easy - Android studio can setup basic watchface project
- Contains Engine and its Handler for time ticks
- Custom update (render) frequency when in ambient mode
- Settings activity on watch
- Mobile companion app in different module with same package name
- Watchface can communicate with mobile via WearableListenerService and wearable DataApi

```
<intent-filter>
  <action android:name=
    "com.example.android.wearable.watchface.CONFIG_COMPLICATION"/>
  <category android:name=
    "com.google.android.wearable.watchface.category.WEARABLE_CONFIGURATION"/>
  <category android:name="android.intent.category.DEFAULT"/>
</intent-filter>
```

# WATCHFACE COMPLICATIONS

- Provides additional information
- Third party data providers - modularity
- Complication slots with specific types
- SHORT\_TEXT, ICON, RANGED\_VALUE, LONG\_TEXT, SMALL\_IMAGE, LARGE\_IMAGE
- Each have mandatory and optional fields
- Watchface responsible for data rendering





# Demo

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# BATTERY LEVEL WATCHFACE



# USEFUL LINKS

- <https://codelabs.developers.google.com/codelabs/adding-complications-to-your-android-wear-watch-face/#0>
- <https://codelabs.developers.google.com/codelabs/data-providers/>
- <https://developer.android.com/distribute/essentials/quality/wear.html>
- <https://developer.android.com/wear/preview/features/ui-nav-actions.html>
- <https://developer.android.com/wear/preview/features/complications.html>
- <https://github.com/tajchert/ExceptionWear>
- [\*\*https://github.com/Komoi/DemoWatchface\*\*](https://github.com/Komoi/DemoWatchface)

# THANK YOU

Ondrej Komarek

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# QUESTIONS

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