Flutter & Wear OS

Hello there 👋

My name is

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You can see my socials and stuff at **renan.gg**

I have a *condition*...

canIRunFlutterOnThis

syndrome

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Trying out something different

Making a Wear OS game

Challenged myself in one weekend, make a complete Wear OS game.

Requirements:

- Has to feel like it was made for the watch
- Has to perform well
- Don’t kill the battery

Running
“Create”

Deploying in
the store


A lot of lessons
Running
“Create”
Deploying in
the store

Summary

We gonna talk about:

- What is exactly Wear OS and what means making an app for it
- What should we expect in terms of hardware
- Running Flutter on it
- Helpful Flutter resources
- Going to the store

Part 1

Wear OS

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What exactly is that:

Wear OS **is** a version of Android, specific for Smartwatches

Running apps in peoples wrists

Running a mobile application UI on a smartwatch is not a good idea.

Addressing some extra constraints can define the app usability

Tiny displays

UIs for in between 1.24 and 1.4 inches
Make each view self-containing
Scrollable views should be used strictly when necessary and obvious
Be careful with clickable areas of buttons

Shawn Rai @unsplash

One finger UI

- 🚫 multi-touch gestures

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Don’t kill the battery

Limited size = limited battery
Go easy on animations and be mindful of the CPU and memory consumption.
Use dark mode.

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Display shapes

Be prepared for Squared, circular, and even *Squircular* displays

Blend with the display edges

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Standalone apps

Wear OS apps can run alongside a companion smartphone App or be totally independent

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Part 2

Hardware interface

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More than the touch screen

Inputs may vary

- Touch screen
- Rotary input
- Physical buttons
- Sensors

Rotary input can be a Physical bezel, a crown or a virtual bezel

Part 3

Running Flutter on it

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It is not official but it totally works…

Wear OS support on Flutter

- There is no official support (from the Flutter team). Efforts in this area are all from the community
- Most Android plugins should work fine on WearOS
- Specific WearOS APIs (such as Health services) are callable via *Method calls*
- No Wear-specific API baked into the Framework
- Uses the “android” directory in the app project

Live code time…

Part 4

Useful resources

Useful packages

“wear” by the Flutter community: Helps to detect ambient mode changes and the shape of the display.

“wearable_rotary” by the Tizen team: Handles rotary input events

Very good template

```
very_good create flutter_app -t wear
```

Kickstart a Flutter app ready for Wear OS in seconds
Using the very good CLI:

cli.vgv.dev

Very good template

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Kickstart a Flutter app ready for Wear OS in seconds
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Part 5

Going to the store

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Play Store

Deploying a Wear OS app can be tricky

- Must mention “Wear OS” on their pages, in the description, and in the title.
- It is necessary screenshots on multiple screen shapes and sizes
- Screenshots should contain the app interface only

Play Store

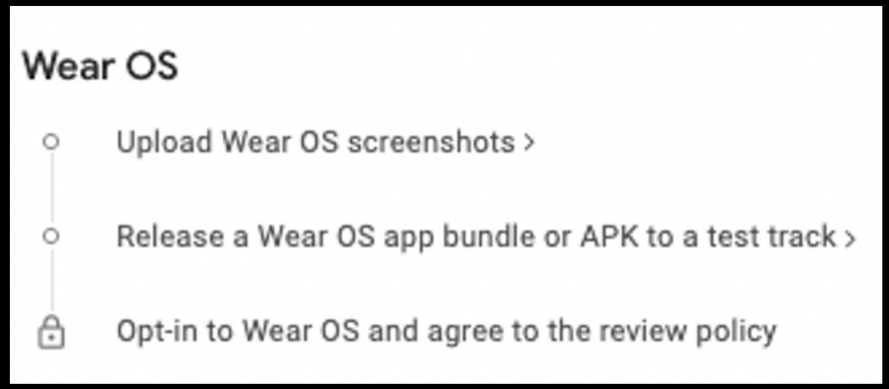
Approval phases in the first deploy

Wear OS apps go through two approval phases: The standard one and the Wear OS specific.

The second approval may take some days.

To start the second approval, go to

Console > Advanced settings > Form factors > Add “Wear OS”



Thank you

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