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Flutter After Hello World



Jeroen Meijer (Jay)

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#DevFest



2019



Who am I



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Who am I

- ▶ Jeroen Meijer (Jay)
- ▶ Dart & Flutter GDE
- ▶ Flutter freelancer
- ▶ Admin and Head of GitHub for the Flutter Community 💙
- ▶ In love with Flutter for 2 years.
- ▶ Writer of the VS Code extension Pubspec Assist



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Flutter



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Flutter

- ▶ Portable UI toolkit
- ▶ Open source
- ▶ Native apps on almost any platform (iOS, Android, Web)
- ▶ High performance
- ▶ Uses custom rendering engine and UI elements
- ▶ Complete control over the screen



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IDE



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IDE

- ▶ Choose your editor (VS Code, IntelliJ/Android Studio, Other)



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- ▶ Learn your editor (extensions, breakpoints, hotkeys)



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IDE

- ▶ Choose your editor (VS Code, IntelliJ/Android Studio, Other)
- ▶ Learn your editor (extensions, breakpoints, hotkeys)
- ▶ Use linters (clean code, consistency, readability)



2019



Tooling



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Tooling

▶ flutter run -d DEVICE_ID



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Tooling

- ▶ flutter run -d DEVICE_ID
- ▶ flutter packages get | flutter pub get



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- ▶ flutter clean



2019



Widgets



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Widgets

- ▶ Immutable Classes, PODOs (Plain Old Dart Objects)



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 - ▶ Parameters `Button(title: 'Submit', color: Colors.blue)`



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 - ▶ Functions `_onTap() { ... }`



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 - ▶ Parameters `Button(title: 'Submit', color: Colors.blue)`
 - ▶ Functions `_onTap() { ... }`
 - ▶ Getters `get _displayedNames ⇒ names.take(3);`



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(Badly maintained packages can cause trouble.)



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- ▶ "There's a widget for that!"
- ▶ Almost all UI is composable from existing widgets
- ▶ If something's missing, look for well-maintained packages (Badly maintained packages can cause trouble.)
- ▶ Multiple types of widgets (visual, layout, functional)



2019



State Management



2019



State Management

Provider

Get It

Redux

MobX

Bloc

ChangeNotifier



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► Which one is the best?



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- ▶ Which one is the best?
- ▶ **None.**



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- ▶ Which one is the best?
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- ▶ How to choose the best one for your project:



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 - ▶ Does my app need to be online all the time?



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 - ▶ What state management pattern does my team know?



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- ▶ Which one is the best?
- ▶ **None.**
- ▶ How to choose the best one for your project:
 - ▶ Does my app need to be online all the time?
 - ▶ What state management pattern does my team know?
 - ▶ How complex is my app and will it grow in the future?



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Backend



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- ▶ Use whatever pattern works for you
- ▶ Recommended: abstract API class + repository pattern



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- ▶ Can be found on pub.dev
- ▶ Are imported using the `pubspec.yaml` file
 - `dependencies:`
 - `camera: ^0.5.4+3`
- ▶ Tip: Use Pubspect Assist to easily add and update dependencies.



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Plugins



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Plugins

- ▶ Most packages are plugins
- ▶ Allows two-way communication between Dart and the native platform code
- ▶ Call native APIs from Flutter
- ▶ Wrap your existing Java/Kotlin and Objective C/Swift code.



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Plugins

- ▶ Most packages are plugins
- ▶ Allows two-way communication between Dart and the native platform code
- ▶ Call native APIs from Flutter
- ▶ Wrap your existing Java/Kotlin and Objective C/Swift code.
- ▶ `camera`, `bluetooth`, `connectivity`, `firebase`



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Go explore!
Ask questions!



Flutter
After Hello World

Thank you for your attention.



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Slides and code available at: <https://jfk.dev/talks>