
IPPON
Discovery to Delivery

Crossplatform & Flutter

October 2019

Me.

#Flutter #android #ippon
#nantes #PAYSDERETZ
#strongandfit #Crossplatform
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Summary.

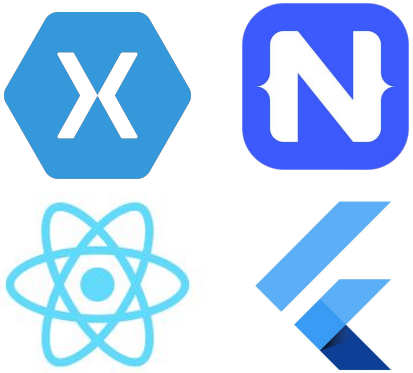
1. Mobile development
    a. State of the art
    b. Issues
2. Flutter
    a. What’s Flutter?
    b. Why Dart ?
3. Going further

Mobile Development
State of the art

Source : posts2212.rssing.com/chan-13732161/all_p9.html

State of the art.

3 ways to develop a mobile app :



Native :

- Swift / Objective-C (iOS)
- Kotlin / Java (Android)

Hybrid :

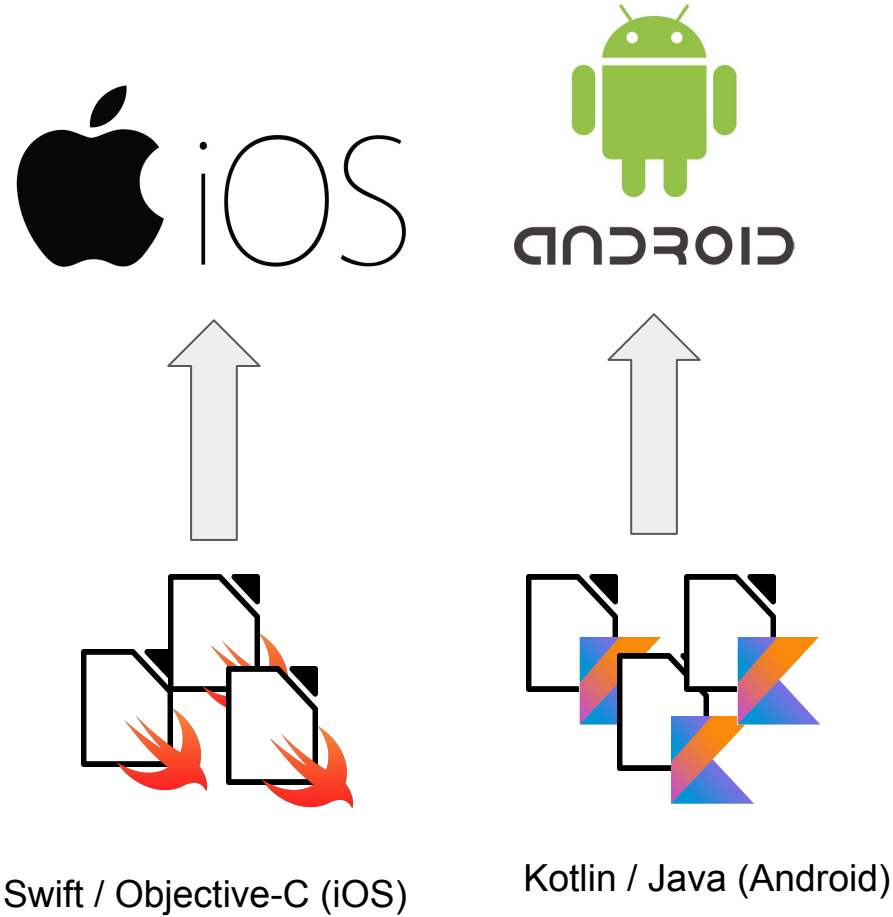
- ionic / cordova / phonegap

Crossplatform :

- Xamarin
- NativeScript
- React Native
- Flutter

Native development.

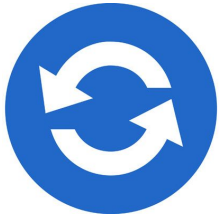
- One codebase per Platform
- The app runs using the sdk components of each platform



Native development.

Advantages :

Fast (native performances)

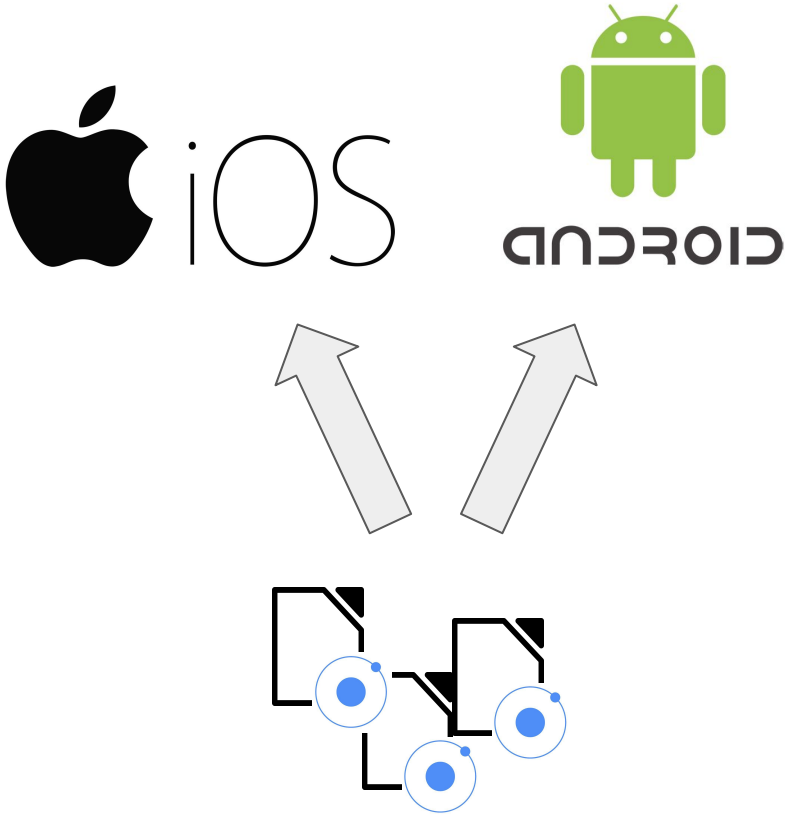


Can enjoy the last features of the platform

Easily integrates the platform’s guidelines

Hybrid development.

- One codebase for all platforms
- The app runs in a webview



Hybrid development.

Advantages :

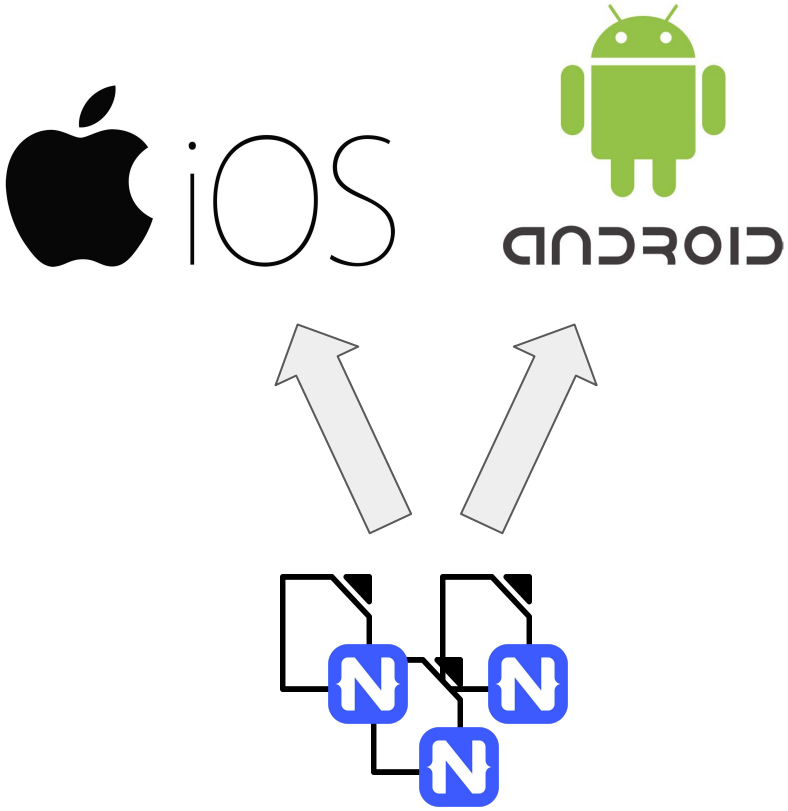
Affordable : easy to learn, fast to code

Many plugins

Theming is easy, as we use HTML and CSS

Crossplatform development.

- One codebase for all platforms
- The app runs within the framework's native engine or uses a bridge to deal with native components



Typescript (Nativescript)

Crossplatform development.

Advantages :

Quite affordable : quite easy to learn, quite fast to code

Quite fast (close to native performances)

Strong communities

Mobile Development Issues

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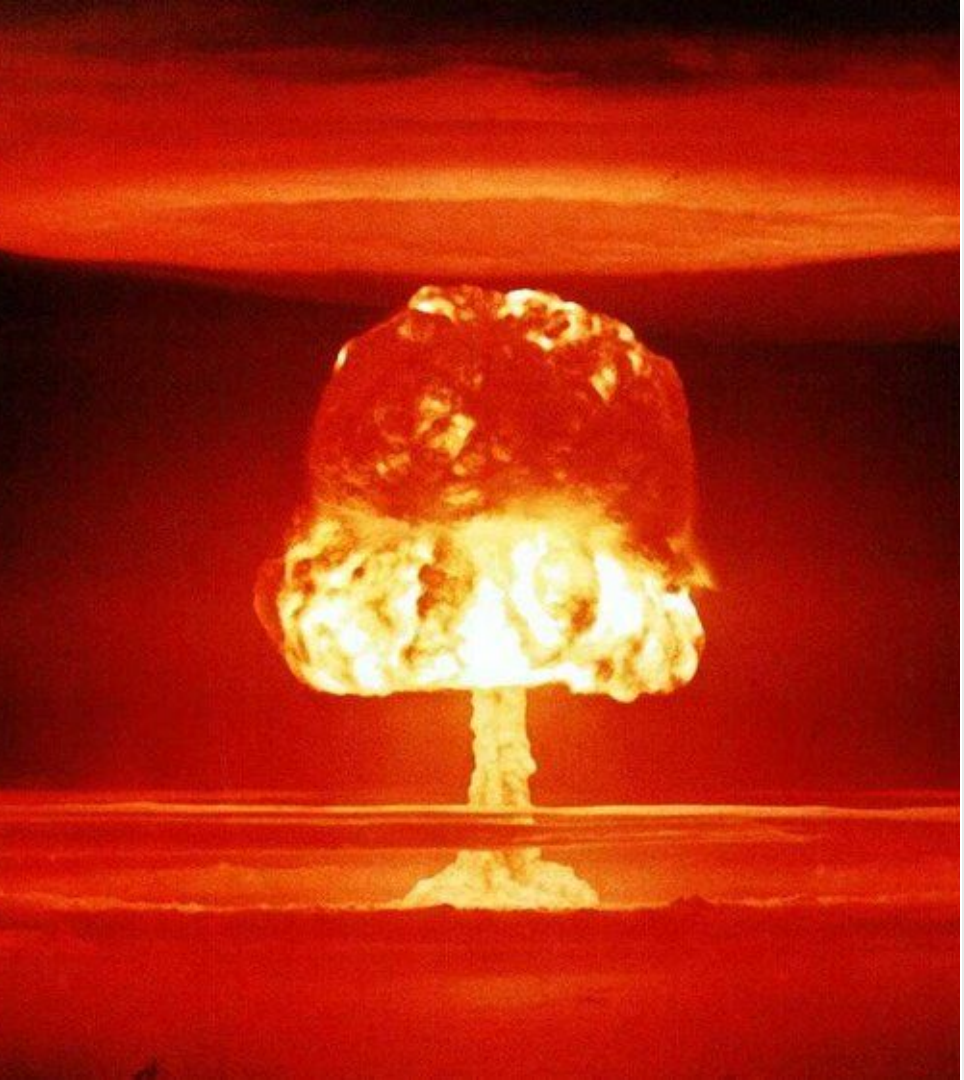


We often get in such situation :

(In mobile development)

“Hey, do you know how to code in Swift?”

“Will it cost me more if I develop in native or crossplatform?”

“Mobile development is so easy”

“...”

4 points of toxicity

1. Follow the hype
2. Consider that the mobile development is easy
3. Choose always the same technology stack
4. Ignore the guidelines

Few words about the guidelines.

- They drive the UX / UI development
- They provide a seamless user experience across all apps

Material Design
https://material.io/

Cupertino
https://developer.apple.com/design/

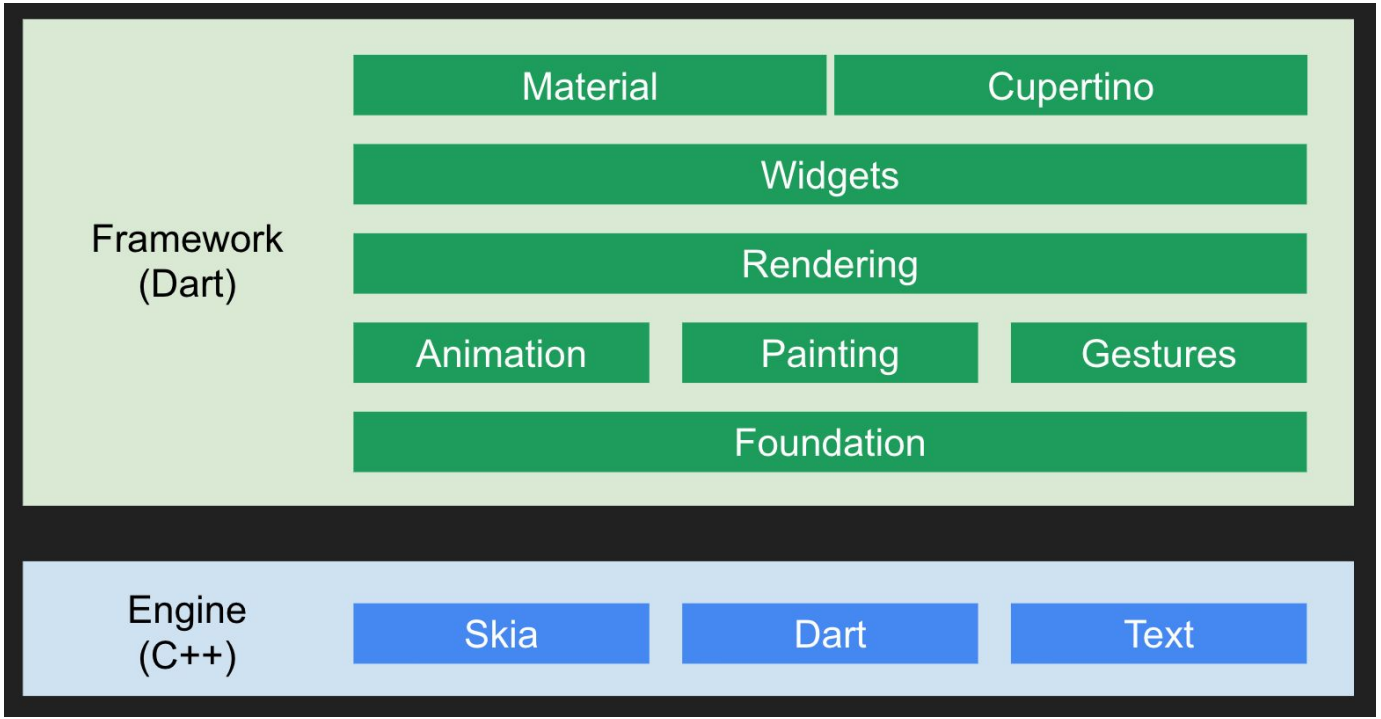
Flutter
What's Flutter?

Source : posts2212.rssing.com/chan-13732161/all_p9.html

Flutter : origins.

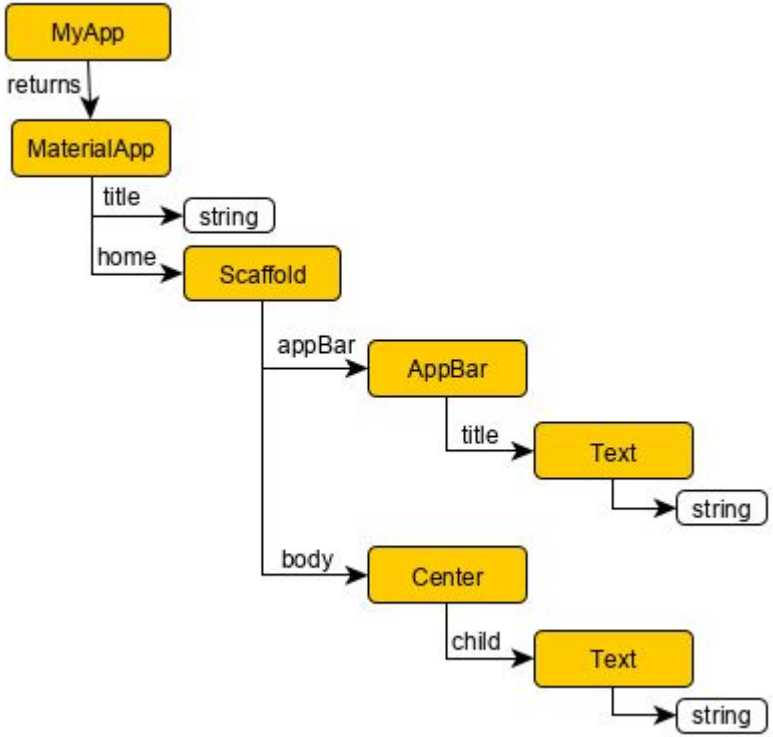
- *“Flutter is Google’s UI toolkit for building beautiful, natively compiled applications for mobile, web, and desktop from a single codebase.”*
- It’s been created at first by the team in charge of the SKIA engine
- V1 last december / V1.9 today
- We use Dart

Flutter : architecture.



Flutter : widgets.

- Everything you see is a widget
- Composition over components



- It’s been famous for its hot reload : https://www.youtube.com/watch?v=1UZ6686QsOw

Flutter
Why Dart?

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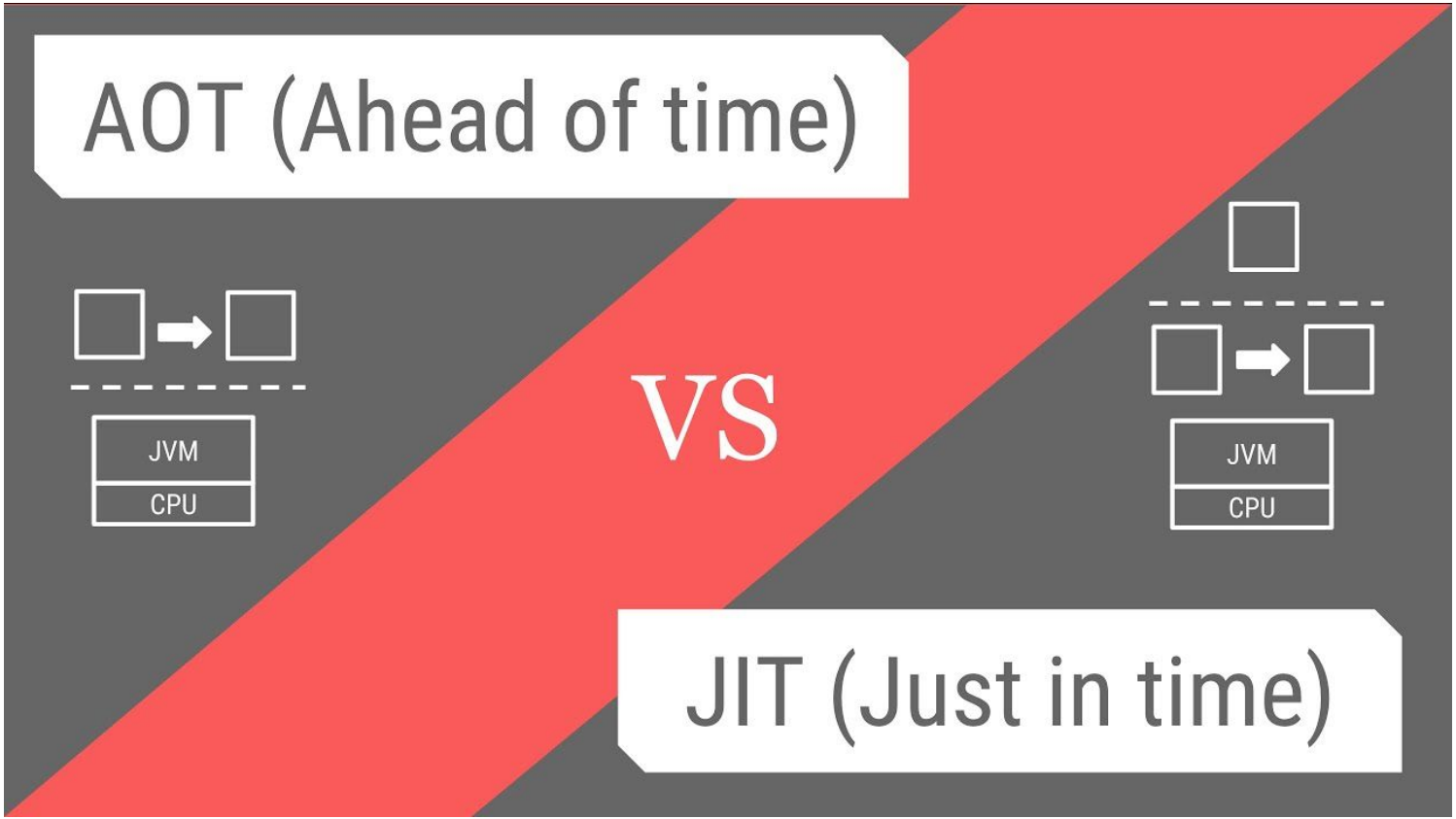
Dart?

Dart

- Former Dash
  - OO language created by Google in 2011
  - At first its main purpose was to replace JavaScript
  - Usable in front and back

- Dart :
  - Can generate native code + ARM + JavaScript
  - Is compatible with BOTH AOT and JIT
  - Optimized to collect and create small objects

AOT / JIT?



Going further

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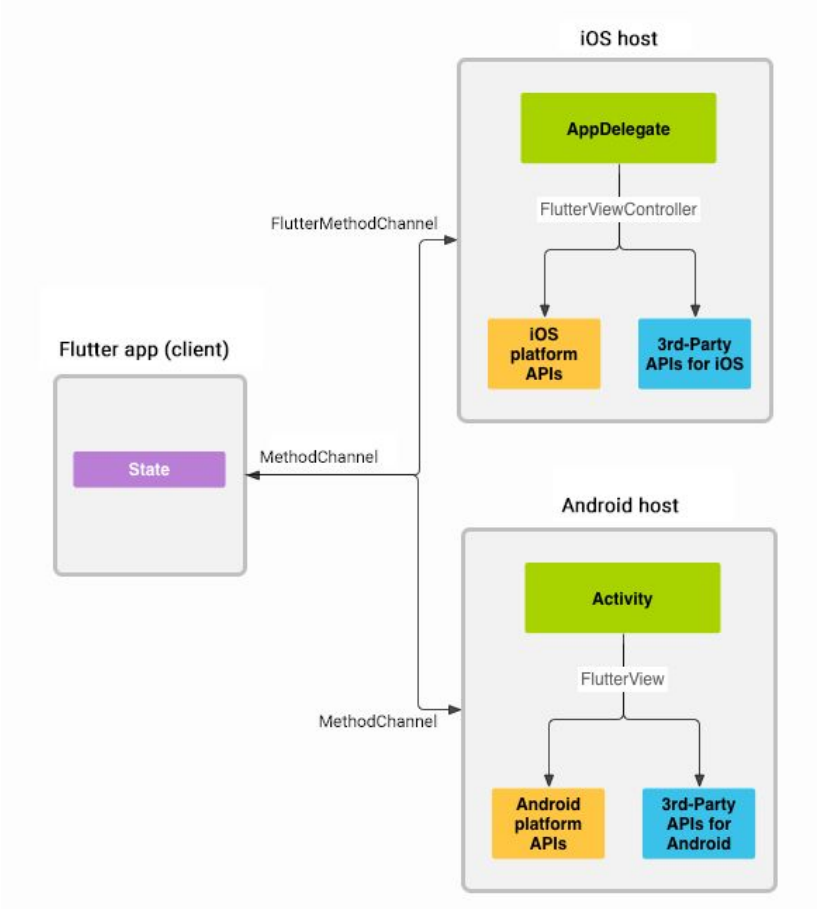
Platform specific code.

- Option 1
  - Platform.*isIOS*
  - Platform.*isAndroid*
  - etc...

- Option 2 : use channels



Hummingbird

Flutter On The **Web**

Book de stages.

https://fr.ippon.tech/stage-ippon/

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