Dart: I'm your Flutter

Dylan Drost

A little bit about me

Android app developer @ **karify** connecting care
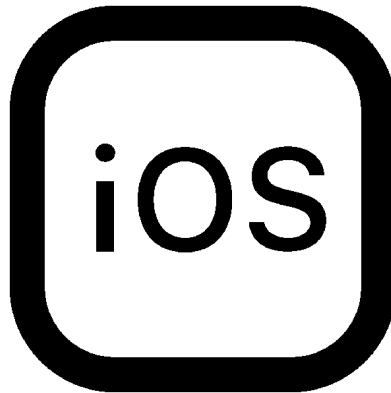
Local Fixer and resident geek for

BETTY'S KITCHEN

a food blog run by my wife Betty
with over 1k post and around 80 to
90k monthly visitors

Flutter

Flutter is a new mobile app SDK to help developers and designers build modern mobile apps for iOS and Android.
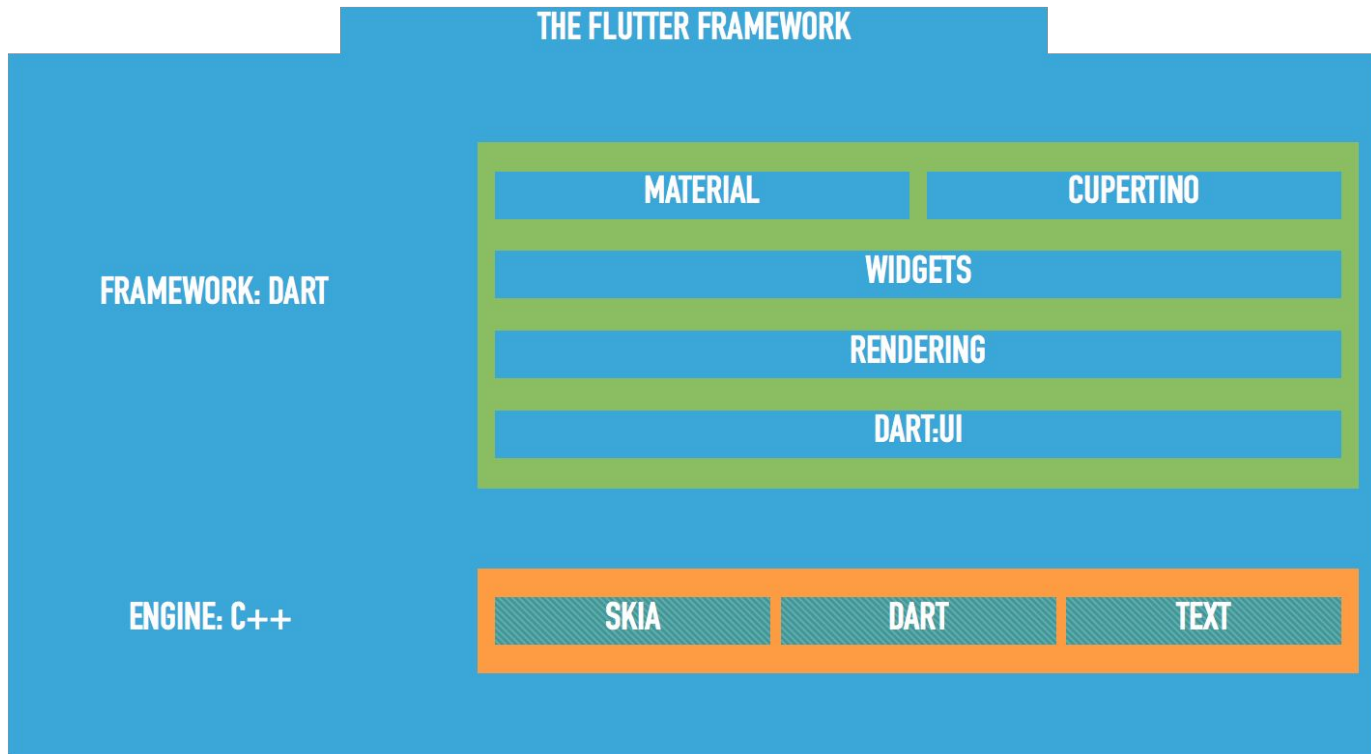
Flutter

Dart: I'm your ~~father~~. Flutter

Flutter

Flutter

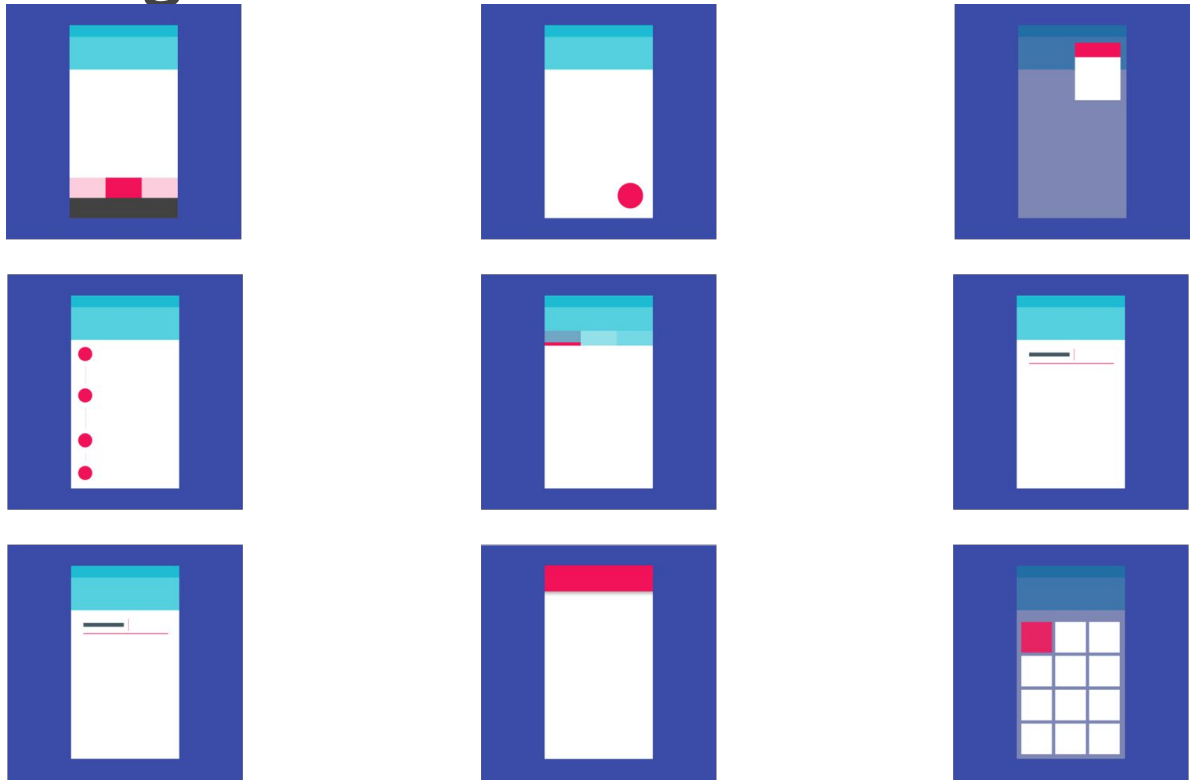|	Compile to native	Interpreted(Javascript)
MVC/MVP/MVVM	Android SDK(Java, Kotlin) IOS SDK(Objective-C, Swift)	Titanium, Cordova, PhoneGap, Ionic, ...
Reactive	Flutter, ReasonML	React Native, Nativescript

Flutter: Technical overview

Flutter: everything is an widget

Almost everything in Flutter is a widget, Gestures are widgets padding is a widget. And they are extendable or you can create your own widgets.

Flutter: widgets

Flutter: plugins

An async way of communicating with underlying platform and hardware like GPS or Bluetooth etc

Flutter: widgets

```
1 class CustomWidget extends StatelessWidget {
2   @override
3   Widget build(BuildContext context) {
4     return const Padding(
5         padding: const EdgeInsets.all(8.0),
6         child: const Text(
7           'Static Text',
8           style: const TextStyle(fontSize: 18.0, color: Colors.white),
9       ));
10   }
11 }
```

Flutter: widgets

```dart
1 class CustomWidget extends StatefulWidget {
2   CustomState createState() => new CustomState();
3 }
4
5 class CustomState extends State<CustomWidget> {
6   bool _isVisible;
7
8   @override
9   Widget build(BuildContext context) {
10     return _isVisible ? const Text('loaded data') : const Text('is loading');
11   }
12
13   @override
14   void initState() {
15     super.initState();
16     setState(() {
17       _isVisible = true;
18     });
19     // do something expensive task and call setState()
20   }
21 }
```

Flutter: setting up

```
$ git clone https://github.com/flutter/flutter.git
$ export PATH=`pwd`/flutter/bin:$PATH
$ flutter doctor
```

And of course have an IDE installed like Intellij

Demo Time

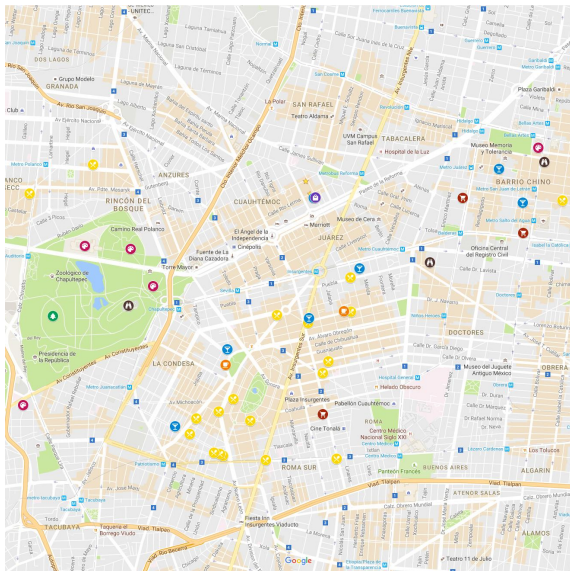# Thing you start noticing

It's fast without optimizing

Thing you start noticing

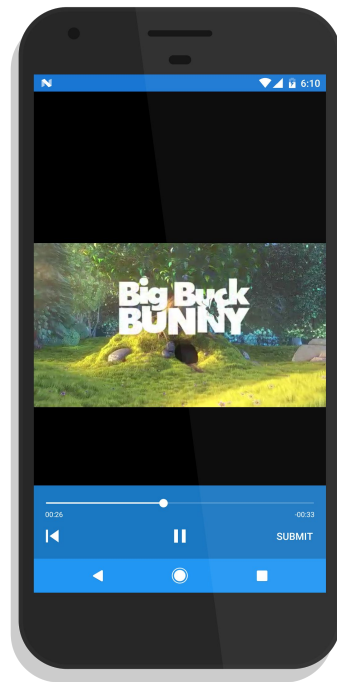Stateful hot reload, why don't we have that on native.

Thing you start noticing

View in code are not as bad as I thought

Thing I didn't like

Missing features compared to native

Thing you start noticing

Getting used to the project structure and organizing code
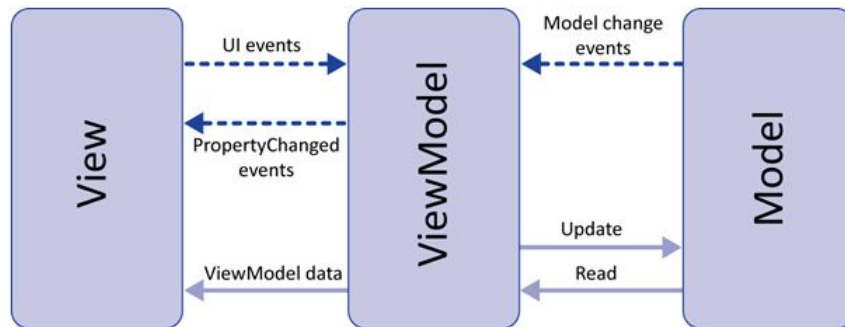
Thing I didn't like
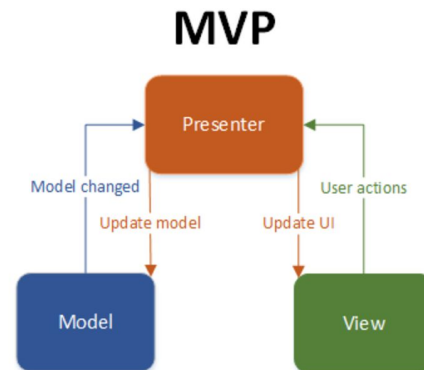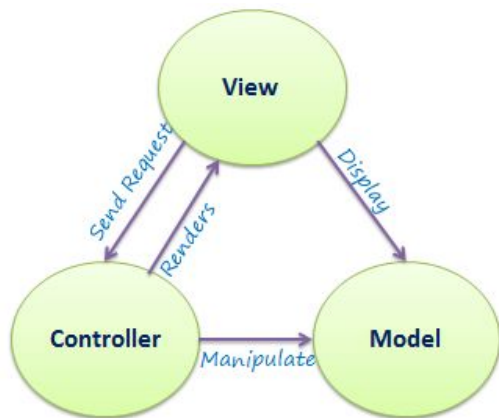
Json Parsing libraries

```
Map<String, dynamic> user = JSON.decode(json);

print('Howdy, ${user['name']}!');
print('We sent the verification link to ${user['email']}.');
```

Thing I didn't like

No architectural decisions made out of the box

Thing I didn't like

Still have to get used to the dependency management

```
FINE: Resolving dependencies finished (5.2s).
ERR : Package built_value_generator has no versions that match >=5.2.0 <6.0.0 derived from:
    | - bettyskitchen_app depends on version ^5.2.0
FINE: Exception type: NoVersionException
```

Thank you!

Questions?

Additional resources

- https://flutter.io/
- https://www.reddit.com/r/FlutterDev/
- http://fluttersamples.com/
- Flutter talks on youtube
- learn Flutter by Bram van Bilsen
- Learn Flutter by Brandon Donnelson
- https://startflutter.com/themes/
- https://hackernoon.com/whats-revolutionary-about-flutter-946915b09514
- Flutter gitter chat