



Flutter



Dart

Olá, boa tarde!



Roger Vargas



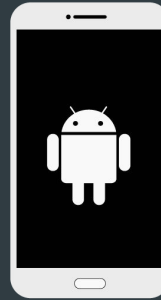
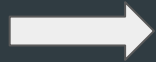
Sistema de Informação
PUC/RS



Dev Full Stack



Flutter





Code Share



APPTREE

70%



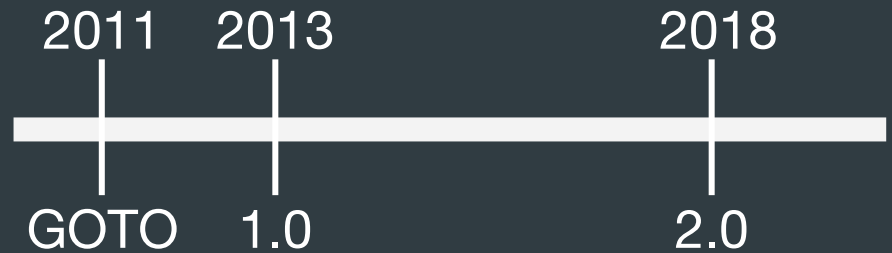
Google Ads

50%





Dart

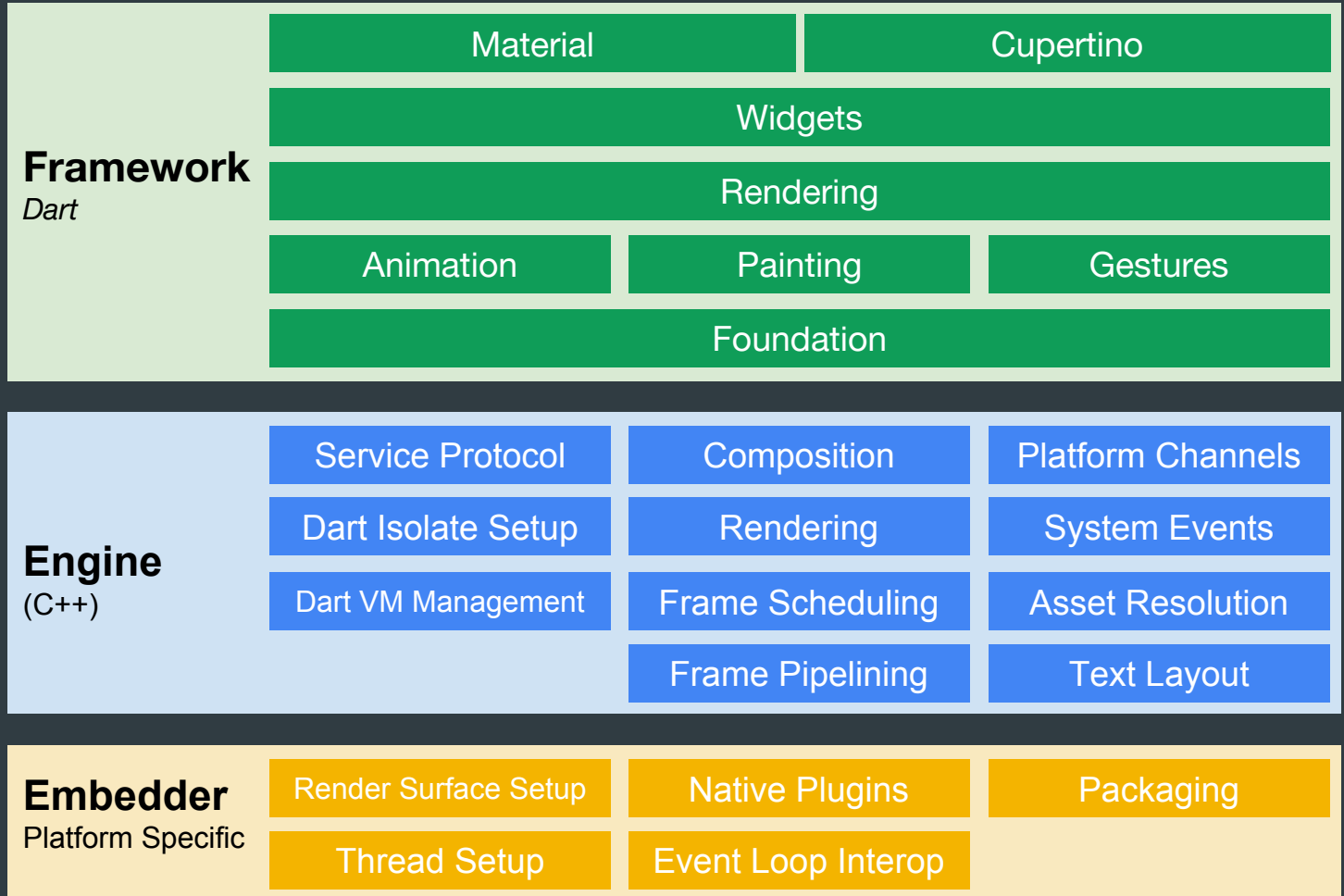


AdWords Express



Google Ads

Visão Geral





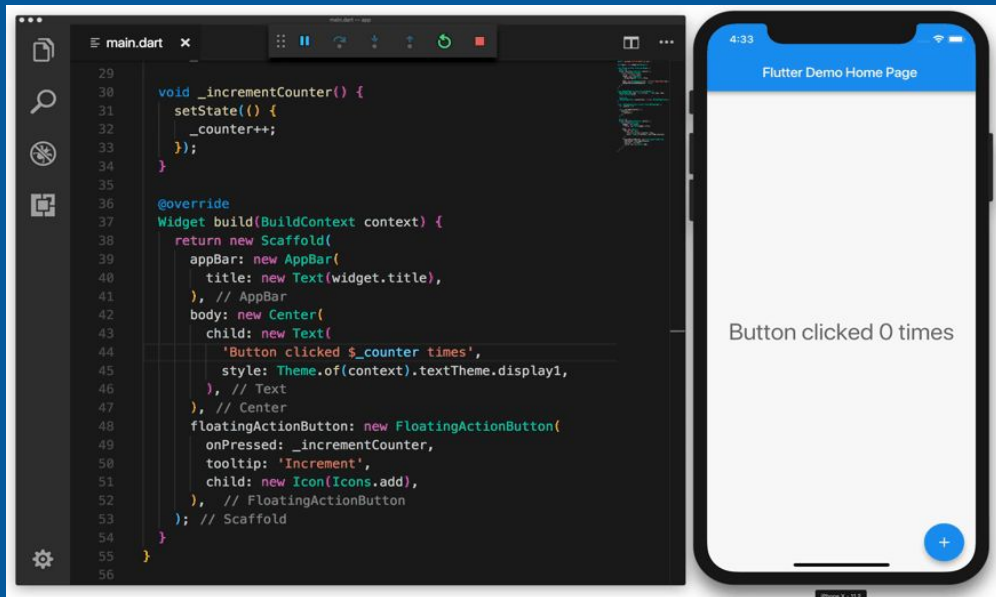
Flutter

Tools/Features



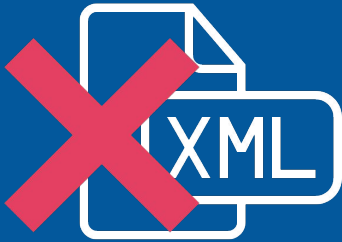


Hot Reload





UI - As code

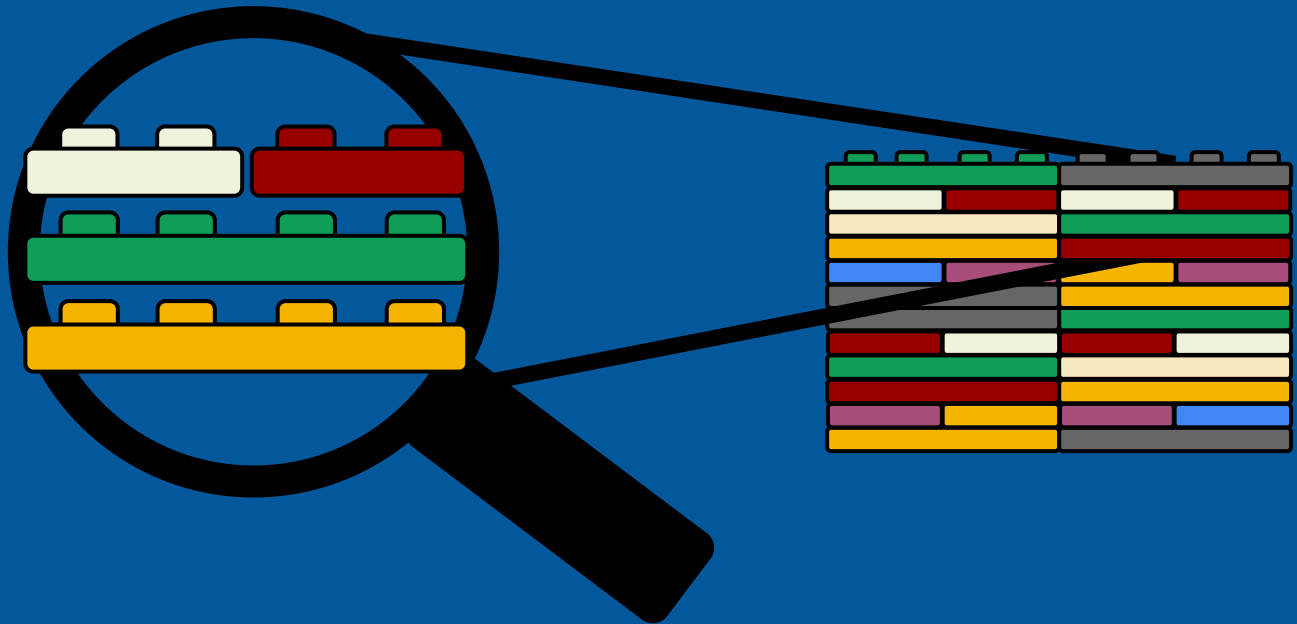


```
44 @override
45 Widget build(BuildContext context) {
46   return Scaffold(
47     appBar: AppBar(
48       title: const Text('Plugin example app'),
49     ), // AppBar
50     body: Center(
51       child: Text('State: $_batteryState Level: $_batteryLevel'),
52     ), // Center
53     floatingActionButton: FloatingActionButton(
54       child: const Icon(Icons.battery_unknown),
55       onPressed: () async {
56         _battery.batteryLevel.then((level) {
57           setState(() {
58             _batteryLevel = level;
59             print("New Level: $_batteryLevel");
60           });
61         });
62         print("Level: $_batteryLevel");
63       },
64     ), // FloatingActionButton
65   ); // Scaffold
66 }
67
```



UI - Widgets

Aggressive composability



WWW

```
<div class="greybox">
  <div class="redbox">
    Lorem ipsum
  </div>
</div>

.greybox {
  background-color:#e0e0e0; /*grey300*/
  width: 320px;
  height: 240px;
  font: 900 24px Roboto;
  display: flex;
  align-items: center;
  justify-content: center;
}

.redbox {
  background-color:#ef5350; /*red400*/
  padding: 16px;
  color: #ffffff;
  width: 100%;
  max-width: 240px;
}
```

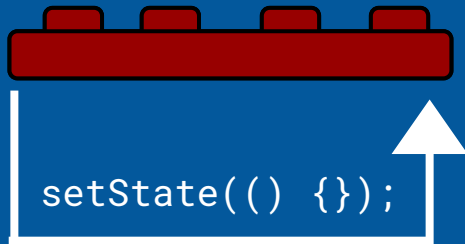
Flutter

```
var container = Container( //grey
  child: Center(
    child: Container( //red
      child: Text(
        "Lorem ipsum",
        style: bold24Roboto,
      ),
      decoration: BoxDecoration(
        color: Colors.red[400],
      ),
      padding: EdgeInsets.all(16.0),
      width: 240.0, //max-width 240.0
    ), // Container
  ), // Center
  width: 320.0,
  height: 240.0,
  color: Colors.grey[300],
); // Container
```



UI - Widgets

Stateful



Form, Image, Scrollable, etc

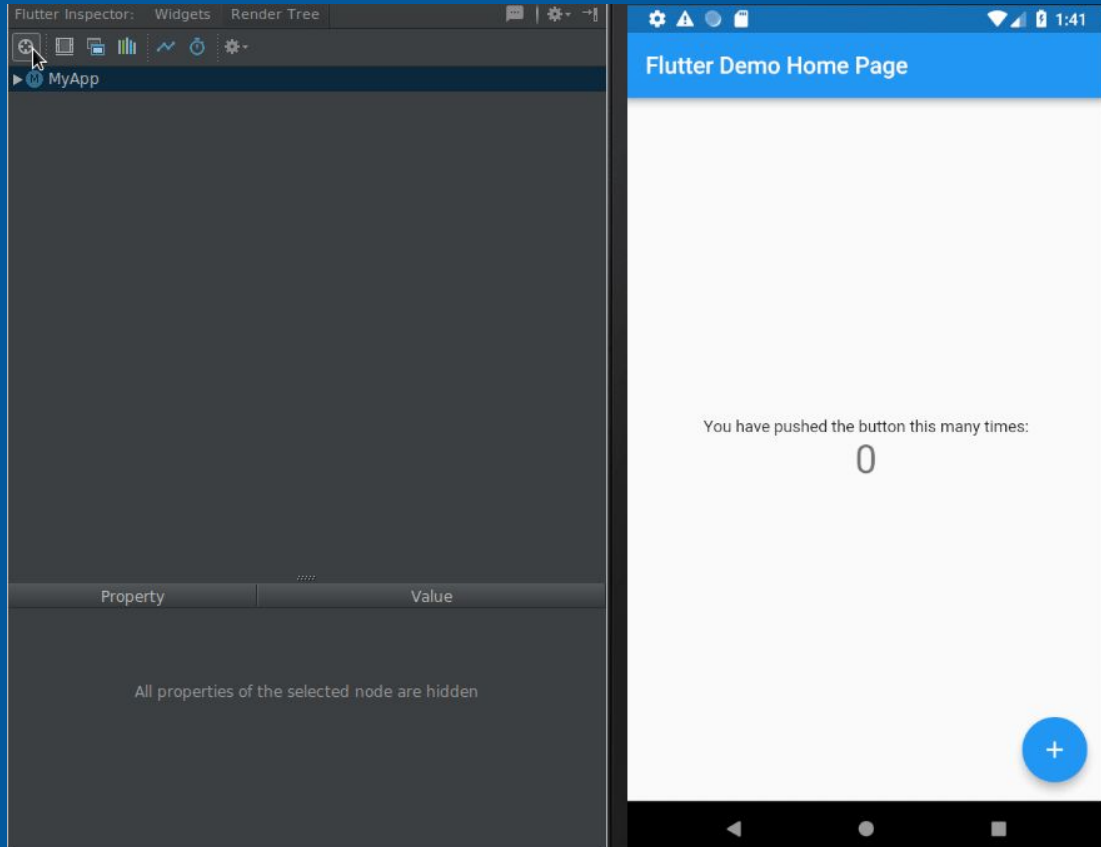
Stateless



Text, Icon, AssetImage, ...

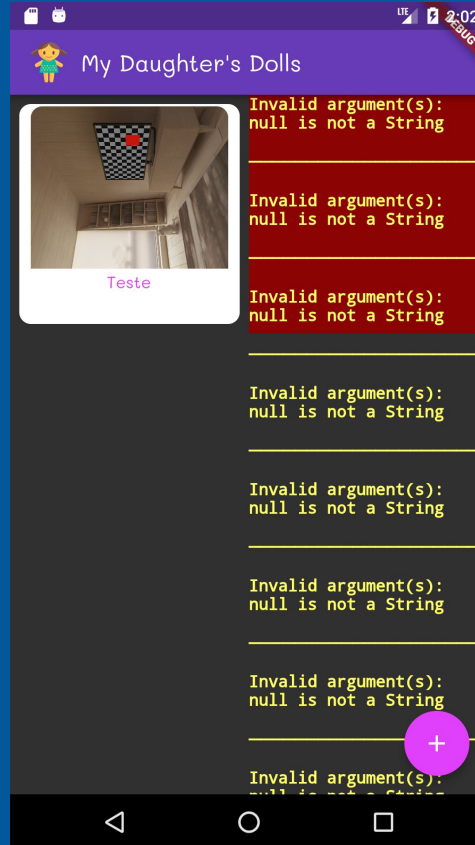


Widget Inspector








Errors







Dependências/Packages

pub.dartlang.org/


 Getting Started: [Flutter](#)  [Web & Server](#) 



Flutter Packages

Search Flutter-compatible packages 

[FLUTTER](#) [WEB](#) [ALL](#)

Flutter  makes it easy and fast to build beautiful mobile apps for iOS and Android.

Top Flutter-compatible packages

[shared_preferences](#)

FLUTTER

Flutter plugin for reading and writing simple key-value pairs. Wraps NSUserDefaults on iOS and SharedPreferences on Android.

[path_provider](#)

FLUTTER

Flutter plugin for getting commonly used locations on the Android & iOS file systems, such as the temp and app data directories.

[url_launcher](#)

FLUTTER

Flutter plugin for launching a URL on Android and iOS. Supports web, phone, SMS, and email schemes.

[firebase_auth](#)

FLUTTER

Flutter plugin for Firebase Auth, enabling Android and iOS authentication using passwords, phone numbers and identity providers like Google, Facebook and Twitter.

[cloud_firestore](#)

FLUTTER

Flutter plugin for Cloud Firestore, a cloud-hosted, noSQL database with live synchronization and offline support on Android and iOS.

[image_picker](#)

FLUTTER

Flutter plugin for selecting images from the Android and iOS image library, and taking new pictures with the camera.

[google_sign_in](#)

FLUTTER

Flutter plugin for Google Sign-In, a secure authentication system for signing in with a Google account on Android and iOS.

[sqlite](#)

FLUTTER

Flutter plugin for SQLite, a self-contained, high-reliability, embedded, SQL database engine.

[cached_network_image](#)

FLUTTER

Flutter library to load and cache network images. Can also be used with placeholder and error widgets.



Battery Example

battery 0.2.3

Published Aug 21, 2018

FLUTTER

[README.md](#)

[CHANGELOG.md](#)

[Example](#)

[Installing](#)

[Versions](#)

92

Popularity:

84

Health:

100

Maintenance:

100

Overall:

92

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- ✉ [bkonyi@google.com](#)
- ✉ [gspencer@google.com](#)

License

BSD ([LICENSE](#))

Dependencies

[flutter](#), [meta](#)

More

[Packages that depend on battery](#)



Dependências/Packages

pubspec.yaml

```
name: tche_linux_app
description: A new Flutter
application.

version: 0.0.1

environment:
  sdk: ">=2.0.0-dev.68.0 <3.0.0"

dependencies:
  flutter:
    sdk: flutter

  cupertino_icons: ^0.1.2
  battery: ^0.2.3

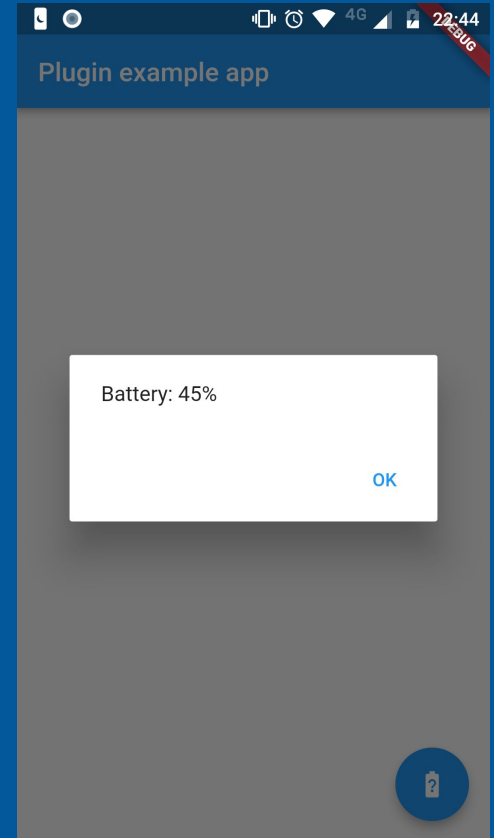
dev_dependencies:
  flutter_test:
    sdk: flutter
```

```
# The following section is specific
to Flutter.
flutter:
  uses-material-design: true
# assets:
#   - images/a_dot_burr.jpeg
#   - images/a_dot_ham.jpeg
# fonts:
#   - family: Schyler
#     fonts:
#       - asset: fonts/Schyler.ttf
#       - asset: fonts/SchylerI.ttf
#         style: italic
#   - family: Trajan Pro
#     fonts:
#       - asset: fonts/Trajaro.ttf
#         weight: 700
```



Dependências/Packages

```
43 @override
44 Widget build(BuildContext context) {
45   return Scaffold(
46     appBar: AppBar(
47       title: const Text('Plugin example app'),
48     ), // AppBar
49     body: Center(
50       child: Text('$_batteryState'),
51     ), // Center
52     floatingActionButton: FloatingActionButton(
53       child: const Icon(Icons.battery_unknown),
54       onPressed: () async {
55         final int batteryLevel = await _battery.batteryLevel;
56         showDialog<Null>(<
57           context: context,
58           builder: (_) => AlertDialog(
59             content: Text('Battery: $batteryLevel%'),
60             actions: <Widget>[
61               FlatButton(
62                 child: const Text('OK'),
63                 onPressed: () {
64                   Navigator.pop(context);
65                 },
66               ) // FlatButton
67             ], // <Widget>[]
68           ), // AlertDialog
69         );
70       },
71     ), // FloatingActionButton
72   ); // Scaffold
73 }
```



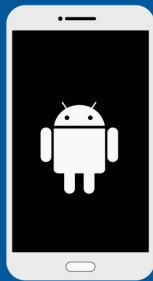


Arquitetura Flutter





Exemplos reais



Xiayu App

50M+





Cursos e Eventos



Flutter Live (Dezembro)

developers.google.com/events/flutter-live



Code Labs Flutter

flutter.io/docs/codelabs

Udacity e Google

br.udacity.com/course/build-native-mobile-apps-with-flutter--ud905



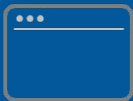
Links



flutter.io



bit.ly/BoringShow



itsallwidgets.com



State Experiments

github.com/filiph/state_experiments

Architecture Samples

github.com/brianegan/flutter_architecture_samples



Flutter - [@flutterio](https://twitter.com/flutterio)

Brian Egan - [@brianegan](https://twitter.com/brianegan)

Andrew Brogdon - [@RedBrogdon](https://twitter.com/RedBrogdon)

Filip Hráček - [@filiphracek](https://twitter.com/filiphracek)

Emily Fortuna - [@bouncingsheep](https://twitter.com/bouncingsheep)



Perguntas?



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Obrigado!