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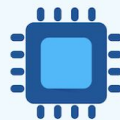
Mobile



Web



Desktop



Embedded

SUMMARY

The mobile application development industry is a rapidly-growing. Application developers search for new gadgets, frameworks, and libraries that can assist them with staying up to date with development tools and systems.

Flutter is a famous UI development system introduced by Google at the I/O event in 2017. It was then introduced to application developers at Google's Flutter Live event held in 2018.

Today, driving brands and government agencies, for instance, VA, SEC, and Marine Corps are putting their confidence in Flutter for helping them create powerful application interfaces.

Let's talk about Flutter's:

- Dev experience
- Mobile App Development Speed
- App performance

AGENDA

WHAT IS FLUTTER?

5 REASONS WHY FLUTTER IS TRENDING

1. IMPROVED APPROACH TO DEVELOPMENT
2. BEST UTILIZATION OF WIDGETS
3. CROSS-PLATFORM APP DEVELOPMENT
4. HIGH PERFORMING APPS
5. INCREASED POPULARITY



WHAT IS FLUTTER?

Flutter is an **open-source** UI Framework and software development kit (v1.17.1 / May 14, 2020) intended to fasten and simplify the UI and app creation process.

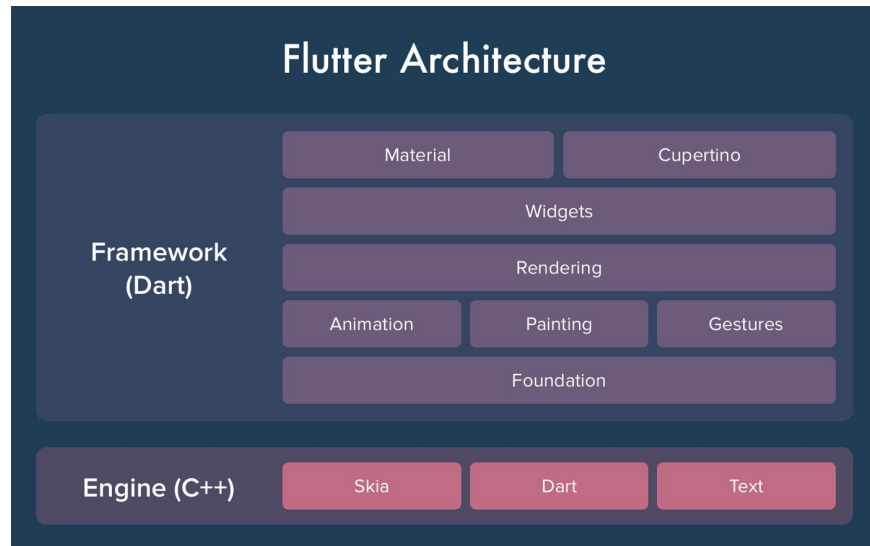
Flutter was launched with features that were missing in the previous **Cross-Platform development frameworks**.

Flutter enables the use of a single codebase for the creation of native Android, iOS apps and more.

Rather than being a framework, it is a **complete SDK (software development kit)** that contains everything you require for cross-platform mobile app development.

Flutter is the only cross-platform framework that provides **reactive views without requiring JavaScript Bridge**.

Flutter combines native performance and quality with high velocity development and multi-platform reach.



IMPROVED APPROACH TO DEVELOPMENT

GOOGLE SAYS 500,000 DEVELOPERS USE FLUTTER MONTHLY

- › **Rich ecosystem** of packages and plugins (1500+)
 - Packages: pure Dart code
 - Plug-ins: Dart + Native code, that includes widgets and Services like Firebase

- › **Hot reload:** facilitates the app developers to in a split second view the progressions made in the code on emulators, test systems and equipment. In under a second, the changed code is reloaded while the application is running with no requirement for a restart. This is incredible for building UIs or including highlights as well as for bug fixing. There's just a single method to see if this is valid.

- › Google Developers have been working on:
 - Support for app development on windows
 - Ability to support a greater number of Firebase APIs
 - Improved documentation
 - Internationalization
 - Supporting Chat, Ads and online videos
 - Tools for visual studio and android studio
 - Bug Fixes
 - Accessible to all types of developers (VIM, EMACS,...)



BEST UTILIZATION OF WIDGETS

REUSING VISUAL COMPONENTS & ANIMATIONS

- › Flutter has a systematic **featurization of all available libraries** that are combined to create an application. This allows to create UI designs quickly, rich in motion, and with smooth scrolling.
- › Flutter makes it easy to start building smart and sustainable applications, with use of **Material Design and Cupertino (iOS) gadgets and best practices**.
- › Flutter is developed to encourage the path toward making **your own designs** or **adjusting** the “out of the box” gadgets to speed the design and development process.

CROSS PLATFORM APP DEVELOPMENT

ONE CODE BASE

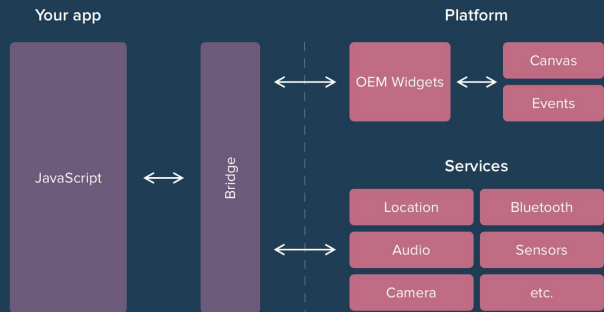
- › Flutter has enabled application developers with a procedure to code once, create, accumulate, and use in different platforms.
 - **Lower Development Time** — Cross Platform application development makes the developer write and work on a single codebase and not to make two different versions of the application, results in saving a lot of time and effort and develops the app faster.
 - **Lower Testing Time** — Because of developing a single application, the Quality Analyst Experts have to test the performance of one app instead of testing two different platforms with numbers of devices and operating systems
 - **Reduced Development Cost** — With lower development time, efforts, and lesser time in testing the app, what comes is the Reduced App Development Cost as the time allocation of the development resources lowers.
 - **Lower Publishing time**- Since the development of a mobile application takes significantly less time compared to a native app development process, it allows faster time to market.
- › Google has announced **Flutter for the web and embedded development**.
- › Other popular cross-platform development: Xamarin by Microsoft, React Native by Facebook, PhoneGap from Adobe, Ionic, Cordova, etc.

HIGH PERFORMING APPS

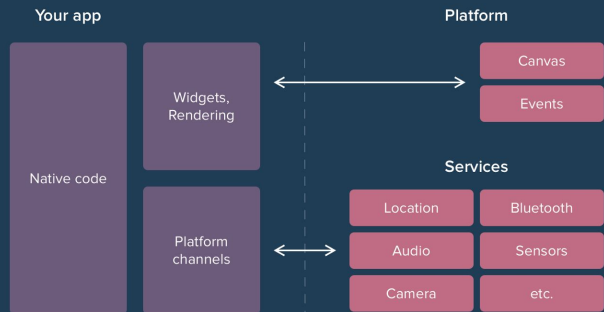
NATIVE REALTIME APPS WITHOUT A BRIDGE

- > Flutter uses the **Dart** programming language which makes it easier for application developers to make animations and transitions that run at the pace of **60 frames for each second**.
- > Moreover, Dart can undoubtedly deal with and achieve procedures of **article assignment** and **trash assortment** with no procedure interruption.
- > Since Flutter applications are gathered to **native code**, they don't require any expansion between the UI sections and programming language.

How React Native interacts with native components




How Flutter interacts with native components



INCREASED POPULARITY

FASTEST GROWING OPEN SOURCE PROJECTS IN GITHUB

- › Top 20 repos on Github
- › Flutter.dev/community, startflutter.com
- › Flutter web! This will empower developers to make applications for Linux, Windows, and macOS.
- › IoT innovation

The State of the Octoverse

Top and trending projects

Top open source projects by contributors

This year, popular open source projects are topping 10K contributors. Two have been on this list since 2016: [microsoft/vscode](#) and [ansible/ansible](#). New in 2019 are [flutter/flutter](#), [firstcontributions/first-contributions](#), and [home-assistant/home-assistant](#).*

Open source projects are growing on GitHub, 20,000 contributors. The open source repository projects on GitHub.*

NUMBER OF CONTRIBUTORS TO OPEN SOURCE PROJECTS

01	microsoft/vscode
02	MicrosoftDocs/azure-docs
03	flutter/flutter
04	firstcontributions/first-contributions
05	tensorflow/tensorflow
06	facebook/react-native
07	kubernetes/kubernetes
08	DefinitelyTyped/DefinitelyTyped
09	ansible/ansible
10	home-assistant/home-assistant

MORE INFO

[FLUTTER FOR DEVELOPERS](#) (MOBILE
WORLD CONGRESS '19)

- Video with a quick development example

[Flutter.dev](https://flutter.dev)



Flutter

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