Introduction to Flutter:

What is Flutter?

- Flutter is an open-source UI software development kit created by Google.
- It is used to develop cross platform applications for Android, iOS, Linux, Mac, Windows, Google Fuchsia, and the web from a single codebase.
- First described in 2015, Flutter was released in May 2017.
- Flutter is a single code base that means you can use single programming language and one codebase to create two different apps (Android, IOS).

Flutter consists of two important parts:

- An SDK (Software Development Kit): A collection of tools that are going to help you develop your applications. This includes tools to compile your code into native machine code (code for iOS and Android).
- A Framework (UI Library based on widgets): A collection of reusable UI elements (buttons, text inputs, sliders, and so on) that you can personalize for your own needs.

To develop with Flutter, you will use a programming language called Dart. The language was created by Google in October 2011, but it has improved a lot over these past years.

Dart focuses on front-end development, and you can use it to create mobile and web applications.

If you know a bit of programming, Dart is a typed object programming language. You can compare Dart's syntax to JavaScript.

Why should we learn Flutter?

Simple to learn and use

Flutter is a modern framework, and you can feel it! It's way simpler to create mobile applications with it. If you have used Java, Swift, or React Native, you'll notice how Flutter is different.

I personally never liked mobile application development before I started using Flutter.

What I love about Flutter is that you can create a real native application without a bunch of code.

Quick compilation: maximum productivity

Thanks to Flutter, you can change your code and see the results in real-time. It's called Hot-Reload. It only takes a short amount of time after you save to update the application itself.

Significant modifications force you to reload the app. But if you do work like design, for example, and change the size of an element, it's in real-time!

Good documentation

It's important for new technology to have good documentation. But it's not always the case that it has it!

You can learn a lot from Flutter's documentation, and everything is very detailed with easy examples for basic use cases. Each time I've had a problem with one of my widgets in my code, I have been able to check the documentation and the answer was there.

Ideal for startup MVPs

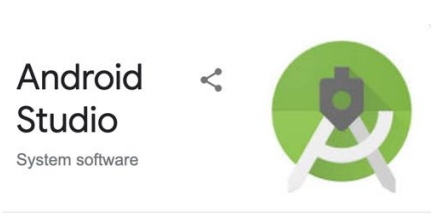
If you want to show your product to investors as soon as possible, Flutter is a good choice.

Here are top 4 reasons to use it for your MVP:

- It’s cheaper to develop a mobile application with Flutter because you don’t need to create and maintain two mobile apps (one for iOS and one for Android).
- One developer is all you need to create your MVP (Minimum Viable Product).
- It’s performant – you won't notice the difference between a native application and a Flutter app.
- It’s beautiful – you can easily use widgets provided by Flutter and personalize it to create a valuable UI for your customers.

Supported by Android Studio and VS Code

Flutter is available on different IDEs. The two main code editors for developing with this technology are Android Studio (IntelliJ) and VS Code.



Android Studio is a complete software with everything already integrated. You have to download Flutter and Dart plugins to start.

VS Code is a lightweight tool, and everything is configurable through plugins from the marketplace.

We will use Visual Studio Code.

You are free to choose your preferred IDE!

Bonus

Freelance

If you want to start doing some freelance work, you should think about using Flutter.

Since, 2020, this technology is blowing up. And that means a lot of developers are hiring who know how to use it.

The biggest platform for freelancers in France, called Malt, recently published the tech trends of this year. Flutter has grown by +303% on this platform between 2018 and 2019.