# My First Flutter Application

<u>Flutter</u> is the mobile application SDK, a framework created by Google, for creating **high-quality** native interfaceson iOS and Android in **record time**. Flutter works with existing code, and is used by developers and organizations around the world.

The *Hot Reload* Flutter lets you test quickly and easily create user interfaces, add features and fix bugs faster. Discover recharge times less than a second, without loss of state, on emulators, simulators and hardware for iOS and Android.

<u>Dart</u> is a general-purpose programming language originally developed by Google and subsequently approved by Ecma (ECMA-408). It is used to create web, server and mobile applications, as well as for Internet of Things (IoT) devices. It is open-source software under a permissive free software license (modified BSD license).

Dart is a unique, object-oriented, class-defined heritage language using C-style syntax. It supports interfaces, mixins, abstract classes, reified generics, static typing, and a sound-type system.

## **Details**

Course duration: 30 hours | laptop required.

Price: 1000 dinars

## For who?

- 18 and over with a bachelor's degree or a BTS.
- People who want to retrain or strengthen their programming knowledge.
- Passionate about web development and wanting to start a professional career as a web Developer.

# Do i need any software development skills?

yes, you will have to familiarize yourself with programming knowledge, basics, loop conditions, exceptions, object-oriented programming (Java).

## What I'm going to learn?

# INTRODUCTION DEVELOPMENT TOOLS

- Windows
- Android Studio
- Installation

#### DART PROGRAMMING LANGUAGE

- Coding and naming convention
- Variable and Types
- Number
- Constant

## DART - FUNCTIONS AND CONTROL STRUCTURE

- Control structure
- Logical operator
- Loop
- Function

## **DART - OBJECT ORIENTED PROGRAMMING**

- Classes and Objects
- Variable
- Manufacturer
- Methods
- Inheritance

## **DART - COLLECTIONS AND DATA STRUCTURES**

- Collections
- Create lists and iterate with them
- Create a list with an object type

## DART LIBRARY, PACKAGES AND PROJECT STRUCTURE

- Bookstores
- · Explore the project structure

#### **FLUTTER SDK - INTRO**

- Flutter and Flutter App
- Bonjour Monde

## **FLUTTER - WIDGETS**

- Container and Basic Layout
- Layout
- · Container and Columns
- Row and Expand
- Stack Widget
- Material Design
- Stateful and Stateless
- Layout creation
- Other widgets

### FLUTTER - CONNECT YOUR APPLICATION

- HTTP and JSON
- Beta 2: JSON and Child Obsolete
- Async and Future: HTTP Request
- JSON Object
- JSON Data in a Listview

#### FLUTTER - READ / WRITE ON DEVICE

- Persistence
- Read and Write in a text file (example: Log, user preference, etc.)
- View data in the console
- Share preferences

## FLUTTER - DATABASE WITH FIREBASE

- NoSQL database
- Dependency and Plugins
- Creation of the database
- Full CRUD Registration and Recovery
- See users in a Listview

## FLUTTER - DATABASE WITH SQFLITE

- Database
- Dependency and Plugins

- Creation of the database
- Recording and retrieval
- See users in a Listview