

Week1

What is Flutter?

Installing Flutter and Android Studio

Hello World App

Flutter is a free and open-source mobile UI framework created by Google. It allows you to create a native mobile application with only one codebase. This means that you can use one programming language and one codebase to create two different apps (for iOS and Android).

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

Installation

- Install flutter SDK and add path to c:\src\bin
- In terminal window use command *flutter doctor* to check the status.
- Install Android Studio (with SDK) and run the hello world app to test if it is working (basic activity)
- Click to Device Manager and create a device min 2gigs of memory
- Install Tools> SDK Manager> Command Line Tools
- Add adb.exe to path C:\Users\Rifat\AppData\Local\Android\Sdk\platform-tools>
- In settings > plugins, download and enable flutter, dart and android apk support

Hello World App

- Start a New Flutter Project
- main > runApp(new MyApp) (ctrl+click opens the main code)
- Add print('build run') and add breakpoints
- Change > Compile > Run
- Hot restart and Hot reload
- Add a for loop in main and delete the runApp line
- If you run the code with dart it runs on computer, if you run it by flutter it runs in the phone without an interface (because we deleted runApp line)
- You can run the code in terminal screen by *flutter run .\lib\main.dart* or *dart run .\lib\main.dart*

References

- <https://www.freecodecamp.org/news/what-is-flutter-and-why-you-should-learn-it-in-2020/>
- <https://developers.google.com/community/experts/directory/profile/profile-gazihan-alankus>