

Mobile Development with Flutter

BootStrap

Objectives

This bootstrap is designed to help you be familiar with:

- 1) The basics of mobile development using Flutter;
- 2) How to integrate the Flutter app with Firebase database (or other backend);
- 3) The development of a simple app prototype.

To finish this bootstrap and get the cash awards, you need to **finish the BootStrap Learning List and the Bootstrap Project** shown in this document.

Resources

- 1) Flutter dev official website: <https://flutter.dev/docs/get-started/install>
- 2) Coding Minds Flutter curriculum: <http://learn.codingminds.academy:3750/> (password: waytoencode)
- 3) Flutter tutorial videos by Dr. Sun:
<https://www.youtube.com/playlist?list=PLOPZGifDyNifcwTaEdatdFKXan-6wgdq>
- 4) Flutter and Firebase: <https://firebase.google.com/docs/flutter/setup?platform=android>
- 5) Any other Flutter tutorials - there are tons of it online

Learning List and the Bootstrap Project

This is a self-study bootstrap. You will need to finish the following tasks (milestones) by yourself with the resources online (there is no specific materials required, and you can just find your way to learn it):

- 1) Installation and setup of the Flutter development environment with Android Studio (preferred);
- 2) Run your app using the Android emulator (run it with iOS emulator or your own phone is a plus);
- 3) Be able to develop the basic UIs;
- 4) Know how to setup Firebase database (either realtime database or Firestore) with the Flutter app;
- 5) Know how to integration Firebase Authentication (email/password only) with the Flutter app;
- 6) Be able to finish an app project, with the following requirements:
 - a) The app idea can be anything;
 - b) The app should have at least 4-5 screens based on the functions needed;
 - c) The app must be using Firebase Authentication;
 - d) The app must be using Firebase Database;

Please note that we are NOT looking for a professional project. We just want you to build something quickly with the components required. You do NOT need a professional UI either. You can consider it as an advanced HelloWorld project. Some of the examples could be: a personal TODO list management app; a note taking app; a simple textbook selling app, etc. You decide the project idea.

BootStrap Assignment Submission

To submit your project, please email the following to hr@codingmindsacademy.com and cc 18629692129la@gmail.com and yu.sun.cs@gmail.com :

- 1) The GitHub repo to your finished Flutter project;
- 2) A short video walkthrough of your app (less than 2 mins) with narration. A Youtube link of the video would be preferred (you don't have to make the video public; you can make it unlisted or simply upload it to Google Drive and send us a link).