

# HOW TO DEVELOP AN ANDROID APP FROM SCRATCH



If you want to create a mobile app, you can, of course, think about becoming a programmer

- You can learn how to code with Java or study the new, popular framework Flutter and learn how to design all by yourself. This way is probably not for you if you have zero coding background and need an app in the measurable future. Also, even if you manage to finish your project, it won't be as good as a professional's work.
- To create your Android application with the help of some patterns and preset functionality on any of the popular online builders, it's a good value-for-money investment to do a quick tryout, like a market test. Just don't try to compete with an MVP that's similar to dozens of mediocre solutions on the same or similar platforms as professionally native Android apps.
- You can address an expert Android app development agency. They provide a full range of services in development, design and quality assurance. This is probably the most expensive way to get your app. But on a highly competitive market, an individually Android app with a brilliant UI, advanced functionality and attractive design is the most effective way to stand out.
- Find a freelancer or a team of specialists who will do all the work for you. This way is faster and cheaper but is connected to certain risks, such as timeline breakages and unpredictable program quality.

Whichever option you choose, there are several stages that an app should go through before it can be released.

## How to start making Android apps

Where should you start when it comes to coding?

Android Software Development Kit is the main tool that developers use to make an app.

**First of all, install the Android Studio program. This is the official development environment (IDE) for Android and is available for Windows, macOS and Linux.**

- You can, however, use other environments besides Android Studio when developing programs for Android.
- If you don't have the Android SDK and other components installed on your computer, Android Studio will download them automatically. As Android SDK is a programming environment for Android, it must be installed with the IDE. The SDK includes libraries, executables, scripts, documentation etc.
- It's also a good idea to install an Android emulator on your computer so that you can run APK applications on it later on. The emulator also comes bundled with Android Studio.

**When all the tools are installed, you can create your first project. First, however, you need to understand the basic concepts of what constitutes an Android application.**

- The standard programming language for Android applications is Java. It's true, however, that Google has begun actively promoting Kotlin as a language that could replace Java.
- The Android SDK tools compile your code along with any data and resources into an APK file (Android package) with the extension .apk. This file contains everything you need to install the application on your Android device.

## How to make an Android app for phones and tablets

At the stage of design, you need to take into consideration all the different screen sizes where your app can be displayed.

- Unlike iOS, Android has hundreds of different smartphone models running on it – not to mention tablets and other devices.
- Obviously, preparing a separate design for every model is no simple matter. Instead, you can either develop a responsive design or just prepare mockups for the most popular smartphones, gradually adding more and more models on the go.

## Hybrid development: how to make an app for iOS and Android

Most businesses opt to release apps for both platforms in order to reach a wider audience. However, developing two apps at the same time is very expensive. So, some prefer to choose a hybrid solution that runs on both OS.

- These are also called cross-platform apps. Such apps are faster and easier to make.
- This, like any other across-the-board option, means a compromise between the technical requirements of the two platforms. Such an app's responsive design can adapt to different screens but not always successfully. For example, the tab bar on an iPhone is usually at the top of the screen whilst Android users are used to having their menu at the bottom.
- A Hybrid app will never work as well as a native application: a cross-platform app can work brilliantly if the components are programmed separately for iOS and Android and joined together in one body. Development costs of such an application, however, can be higher than for two separate apps. Maintenance costs, for sure, will be higher as well.

**How will you find a compromise? It should be noted that finding a professional who will do quality work developing cross-platform mobile software is more difficult than finding an iOS or Android developer.**

## How to develop an app for beginners

Android development is now one of the most promising fields for programmers. Talented developers make good money and have interesting tasks. How do you become one of them? Follow these five steps:

### 1. Learn a programming language

It's up to you whether you want to learn JavaScript or Kotlin – the two most popular languages. On the one hand, JS has been around longer and as such has more elaborate libraries and frameworks. On the other hand, Kotlin is most likely to [overtake it in the future](#).

### 2. Download and set up Android Studio

Once you know how to code, you will need to install the environment for Android development. This, for example, could be [Android Studio](#) – the most popular IDE today.

### 3. Start a new project

Open the program and begin your first project. Android Studio intelligent code editor will help you to create better code, work faster and be more productive thanks to code completion, refactoring and code

analysis tools.

#### 4. Code the app

This is the step at which you write the functionality of the app. During the backend stage, you manage the interchange of data between the end-users and the server-side or a cloud solution.

#### 5. Take care of the layouts

The application will be unusable if it doesn't have a clear, user-friendly interface. The last step will be to unite the backend and the frontend parts of your app to create a finished project.

## How to easily make native applications for Google

In any case, if you aren't sure whether you'll be able to code an app yourself and IT agencies are too expensive, there is a way. Special app builders out there on the market can help you make professional apps with no special skills for a really low price.

### How to make a basic Android app

If you need to make an Android app quickly for your own needs, feel free to try out some online app builders. Several of them even provide some basic functionality for free, allowing you to experience what the process of app-building is like.

**However, their functionality is strictly limited, as is the number of design templates they offer.**

### How to develop an app for free

Here are some of the app builders you can check out.

- **Appy Pie**

A simple and inexpensive 3-step app creator with a 14-day free trial period.

- **AppMachine**

Lets you turn the content from your website into an iOS or Android app. Has tools for promotion and design.

- **TheAppBuilder**

A quick way to get a working application based on your business needs. Many scalable offers, some of which are quite costly.

- **Wix**



Wix is more famous as a website builder. Now its makers have also developed a highly customisable platform for developing Android apps. Has free options.

- **GoodBarber**

You will need less than an hour to develop a native app for any of the popular OS, or a progressive application that runs on any device.

## How to earn money by making mobile apps

Mobile applications are a perfect way to make money from scratch or increase your income as a company. Choosing the [right strategy for monetisation](#) will help you not only pay off all of your related expenses but also earn extra income.