Outlook of App Development

GANDI YASWANTH SAI

91-9603616424

+91-7981303572

Contents

1.	Prerequisites for Native app development	2
2.	Apps using Native language	3
3.	Industrial usage of Native apps	4
4.	Hybrid App development Intro	5
5.	Hybrid apps using React Native	6

Key point: We may not give the correct information upto 100%. These are the points and subject we learnt from our experience. WE ARE ALSO STUDENTS!!!

Course Prerequisites

1. Choose and learn a particular Native language:

Most commonly used native languages for android app development are JAVA, Kotlin etc.. We highly recommend you to learn one of these languages beforehand and do hands on practice on Object Oriented Programming(OOP). This whole information and app development is based on OOP concepts.

2. Install Android Studio (latest version):

Please install Android Studio and that too latest version because the first and most point you need to remember is every plugin and sdk is updated by google along with time and you need the latest version of those sdk and plugins at the time of development to see a better and correct performance of your application.

Link to Know the Installation process:

Link: How to Install Android Studio on Windows 10 (2020)

Note: This documentation only consists of some links which we recommend you to watch and learn from basics and do practice them. Please get used of reading documentation as android changes its functionality some times and drops some functions from the plugins(Kind of libraries in python) and also adds some new features as functions also. And also try to browse as per your requirements and learn accordingly.

Apps using Native Languages

1. Concept and basics:

Link-1(mostly concept): <u>Android Full Course - Learn Android in 9 Hours | Android Development Tutorial for Beginners| Edureka</u>

Link-2(mostly live demonstration)[optional]: <u>Android Development for Beginners - Full Course</u>

2. Important Topics:

We highly recommend you to watch this video tutorial series to know about components:

Link:

 $\underline{\text{https://www.youtube.com/watch?v=EHnJs-9_kzY\&list=PLM8gmU39ZoDeWWtDFxNM2N-2N9CtG}}\\ \underline{\text{um_E}}$

Industrial Usage of Native Apps

Till now you might have learnt building apps with basic architecture leading to a high run-time and takes a very long time to build an Activity. This is where Threads come into picture which help asynchronous running of tasks and thus google developed a separate functional component called async task type of functionality to help developers build an efficient app.

Link: Create an Async Task in android

Some of the documentations given by google:

How to read the official Android documentation | by Anirudh S

Hybrid App Development Intro

Till now we saw how to develop apps using JAVA which are only suitable to make an android app. If you want to make an IOS app again you should build a new app completely from scratch in Xcode.

But what if you want to make both Android and IOS apps from a single project file?

This is where hybrid apps come into picture. The most commonly used hybrid apps platforms are:

- 1. Flutter uses Dart language (by Google)
- 2. Ionic
- 3. React-Native (by Facebook)

Flutter is an initiative by Google and a broadly used cross platform tool to build apps. Flutter compiles its code into both ios and android platforms.

lonic is also a cross platform tool which uses a different method to build apps. Ionic basically setups a localhost running in your device while you open the app and it shows the screens which are nothing but your code converted to a html page and rendered while app is opened.

Last but not least React-Native is also a most commonly used cross platform tool now-a-days. React Native basically converts your files to native codes in both ios and android at the same time. This is a most commonly encountered platform now as apps like Facebook, Instagram and Netflix which played a crucial role in our lives during and post-lockdown period too are developed in React-Native platform.

Let's dive deep into the React Native app building.

Sources

React native is like a separate tool which runs on javascript and converts the code into native languages. So before starting this get to know the taste of android development and its processing to get a better idea on what your code actually does in native language too.

Learn JAVASCRIPT before starting this course.

Link: <u>JavaScript Tutorial</u>

Installation:

Please install React-Native-Cli only(it helps efficiently while exporting app):

https://reactnative.dev/docs/environment-setup

Note: If you are facing any problem with exporting app then please shift to JDK-11. (refer below free course link)

Free course Link: [Udemy_] React Native - The Practical Guide

The above link is a complete guide to learn React Native.

Note: The above course is made using react native version at that time. So please refer docs to know any further information about components.