



Android Learning Guide

Android Recommended Curriculums

This guide will assist developers understand the foundations of Android security, defensive programming for Android and other Android mobile application development techniques. It is recommended to have Java and C# experience prior to these Android courses.

Android Mobile Development Courses

Defensive Programming in Android: Defensive Programming is a set of techniques and coding practices that allow you to create software that is reliable, resilient, maintainable, easily tested, and efficient. It considers an approach to programming that aims to minimize the possibility of the unexpected occurring at run time, by anticipating and preparing for potential issues. This path of courses covers general defensive programming techniques that can be applied when creating apps for the Android mobile operating system.

New Features in Android 5.x Lollipop: Android Lollipop includes radical new features including an all new UI style, a new application execution engine - ART, and many more enhancements for the developer. This path gives an overview of those changes for current Android developers.

Android for .NET Developers: Mobile applications already make up a huge portion of software development efforts and that segment is growing larger. Native development environments for mobile platforms can have steep learning curves and may require multiple skilled programmers in order to target multiple platforms. Making use of an existing desktop language and SDK that can target multiple platforms from a single code base has a number of advantages. Xamarin.Android leverages the .NET platform and C# language to allow development of Android, iOS, and other Mobile apps using a significant portion of shared code. In this learning path, you will learn about the Xamarin platform and specifically how it is used to develop mobile Android applications. You will also learn about some alternative Android development methods and some of the underlying technologies used.

Android App Development Essentials: Android App Development Essentials prepares today's developers for the high demand in the IT field. The high demand is based on Android's penetration of various devices. These essentials allow entrepreneurs to use the open source elements to bring into reality whatever app idea they have. This path of courses covers the various features of the Android mobile operating system and the basic skills required to become a mobile application developer by using the Android platform. These courses also describe the Android SDK, Android Studio, App creation, main Android components, Android life cycle, life cycle management, and general debugging.

[Click here](#) to visit the **Android Mobile Development course series in DXC University**

Other Android Courses

Foundations of Android Security: Mobile devices running the Android operating system are widely popular among today's app developers as Android provides an open development platform, giving full access to frameworks and APIs while offering fewer development constraints as compared with other current platforms. In this learning path, you will be introduced to the Android environment and overall architecture, presented with a basic understanding of key Android OS security features, and will learn how to protect Android application code using various proven techniques as well as best practices to employ in order to develop secure Android applications. You will also learn about various vulnerabilities as they pertain specifically to Android applications, how to secure Android devices and applications for the enterprise environment, how to plan and carry out penetration testing using a variety of tools and best practices in addition to performing forensics and hacking techniques on Android applications.

[Click here](#) to visit the **Foundations of Android Security course series in DXC University**

Testing Android Apps with Genymotion: Genymotion is the next generation of the AndroVM open source project. This path's course covers leveraging the Genymotion technology that can be applied when creating apps for the Android mobile operating system. It also covers how to use device peripherals such as GPS, Camera, and more.

[Click here](#) to visit the **Testing Android Apps with Genymotion course series in DXC University**

Programming Cross-Platform Applications in Visual Studio with Xamarin: Xamarin software enables the development of cross-platform mobile applications using C#. This path covers creating separate native Android and iOS projects that can share code within a cross-platform solution and the path covers using Xamarin. Forms to create a single solution from scratch for different platforms.

[Click here](#) to visit the **Cross-Platform Development course series in DXC University**