

Android App Development Course Content

Course Description:

Android is a mobile OS maintained by Google using C++, Kotlin and Java programming language to develop apps on the Android platform. The android studio is the best IDE for android development which includes Android SDK, NDK, tools, and emulators.

Demand for developing apps constantly evolving, so get started with our online training program to learn all core concepts of android app development from scratch to become an android developer. Prior knowledge of any programming language will be beneficial to take the tutorial.

Android app development online training includes all concepts like architecture, user interfaces, activities, controls, layouts, services, content providers, and multimedia APIs and testing and deploying. As a part of this course, you will know how to create widgets, customize list view, grid view, spinners using audio, video and SQLite database and finally publish it on google play store. Practical hands-on experience will be gained by exercising assignments and project work which are included within the course. Our training methodologies will enhance your skills to become a competent android app developer.

Course Content:

Introducing the Android Platform

- Establishing the development environment
- Analyzing components of the architecture

Leveraging Application Fundamentals

Building mobile applications

- Creating activities to process user input
- Implementing views to build the User Interface (UI)
- Packaging applications for deployment
- Developing unit tests

Supporting asynchronous behavior

- Performing background tasks with services
- Communicating with intents

Creating User Interfaces

Selecting visual components

- Building the layout
- Connecting a view to an activity
- Positioning form elements

Working with resource declarations

- Declaring component definitions and layouts
- Handling multiple screen resolutions
- Localizing applications

Processing User Input

Communicating with the user

- Creating and displaying Toast
- Generating status bar notifications
- Logging key application events

Interacting with the UI

- Responding to user input events
- Launching activities with intents
- Writing Java event handlers
- Generating context and option menus

Managing the activity lifecycle

- Integrating with the Android system
- Persisting data in response to notifications

Persisting Application Data

Selecting storage options

- Contrasting internal and external storage locations
- Saving application configuration with SharedPreferences

Manipulating the SQLite database

- Executing queries to locate information
- Specifying column selections with projections

Consuming and creating content providers

- Accessing shared data resources
- Addressing content providers with URIs

Maintaining System Responsiveness

Avoiding Application Not Responding (ANR) errors

- Unloading the UI thread
- Designing for asynchronous execution

Building background services

- Launching IntentServices
- Declaring services in the manifest

Exchanging Data over the Internet

Interacting with server-side applications

- Synchronizing Android devices with servers
- Communicating via HTTP clients

Developing clients for web services

- Connecting to RESTful services
- Creating and parsing JSON

Enhancing the User Experience

Incorporating the Action Bar

- Manipulating objects with drag and drop
- Supporting orientation and multiple screen resolutions with resources
- Combining fragments into a multi-pane UI

Leveraging geolocation and mapping capabilities

- Plotting positions on Google Maps
- Establishing location through GPS, Cell-ID, and WiFi

Uploading to Playstore

Publishing the App in PlayStore

- Setting up the App Icon
- Preparing for Publishing
- Publishing the App in the Android market
- Providing information for the Play Store