



Android Application Development I Course

Android training in Application Development is a hands-on Android course designed to provide essential skills and experience with developing applications on Android mobile platform. This course is best suited for Java developers who are seeking to master the Android API and best practices. Throughout the course, the students develop a real-life application, which can serve as a basis for their future Android projects.



Android training Outline

➤ **Benefits of Attendance:**

- ✚ Work with the basics of Android and understand the role of Java in its applications
- ✚ Test and debug Android applications
- ✚ Create interactive Android user interfaces
- ✚ Store and retrieve data
- ✚ Use location services and maps
- ✚ Add graphics, audio and video to Android applications
- ✚ Integrate search into applications
- ✚ Publish apps to the App Marketplace
- ✚ Implement Android development best practices

➤ **Prerequisites:**

No prior knowledge of the Android OS is required.

Course Outline

Sr. No.	
Ch 1	
1	Introduction What is programming?-Intro to java programming/OOP intro to mobile developemnt Intro to Android? Features of Android? Java in Android
2	Android - IDE configuration and environment setup. Introduction to development environment
3	Sample "Hello World" Application Discussion How to run and Debug Android Application



Ch 2		
1	Android Resources • Layouts, Strings, Plurals • Colours, Dimensions, Images	
2	Basics of Android Project Working with User Interface 1) Various Widgets like Button, CheckBoView, Edit View ,Spinner etc 2) Layouts Like Relative, Absolute, Table, Linear, Frame	
3	Intents , accessing resources within Project / APK file, bundels	
4	Lab Assignment : Creating form to accept data and Form navigation	
Ch 3		
1	Android Activity Activity Life cycle Interact with other application	
2	Lab Assignment : Creating Application including Activity Life cycle	
Ch 4		
1	SQLite DB, File Handling, Preference activity	
2	Lab Assignment : Creating, Inserting, fetching & deleting form data	
3	Lab Assignment : File Handling, Preference sharing	
1	List view, grid view, dynamic table generation, Item Selection and Alignment	
2	Lab Assignment : Dynamic UI generation , different types of list-view.	
3	Lab Assignment : fetching & displaying form data & adding various events to it.	
Ch 5		
1	Broadcast receivers, services – Notification, Alarm and Toasts.	
2	Security and Permissions eg:- Sending & receiving text messages, Telephony, email	
3	Lab Assignment : Sending and Receiving SMS, email, Telephony	
4	Lab Assignment : Alarm and Notification	
Ch 6		
1	Working with Content Providers – Accessing phone contacts and updating them Working with Location Manager – Receiving the latitude and longitude of current location	
2	Lab Assignment : Accessing Gallery content	
3	Lab Assignment : Adding , deleting , update data to Phone contacts and display them.	
Ch 7		
1	Playing Audio-Media Manager, Media player, Media Recorder	
2	Working with camera : modes of image capture, Controlling and Monitoring settings and image options	
3	Lab Assignment: Record audio, play video files, Using Camera	
Ch 8		

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المعلومات

1	Google Maps, , Bluetooth API	
2	Lab Assignment: Using Maps, Bluetooth	
3	Cross Platform Mobile Developments	