



Department of Electronics & Communication Engineering
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Short Term Course on Development of Android Application (1st to 10th June 2018)



Overview: Android Application Development is a hands-on course which is designed for providing essential skills and experiences to the students in developing applications on mobile platform. The hands-on training is effective for beginners and experienced developers for practical Android Code Application. Android is the most popular mobile platform in the entire world. The objective of this course is to expose anyone to the world of Android app development. Participants can learn the following content:

- Introduction to Android
- Android Architecture details and Explanation
- Introduction to Components of Android and functionality
- Build Android APP
- Introduction to SQ-Lite Database and Operations of DB
- Introduction to HTTP URL Request (API call to Server / Cloud Server)
- Introduction List View and Recycler View
- Design Material Navigation Drawer Design like Gmail Navigation Drawer
- GPS and Google Map Integration
- Android Push Notification
- Introduction to Fire Base
- Social Media Sign-In and Login (Face Book/ Google Integration and Development)
- Payment Getaway Integration (Example of PayPal and Other Payment Gateway)
- Android Web view and Web Page Display
- Real-time Application|Development
- Introduction to Play Store and App Publishing



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About Android App Development: Android is the platform that powers millions and millions of mobile devices in nearly 200 countries all around the world. Android can bring you games, apps, books, movies, music and similar digital content. Android is an open source project of the Open Handset Alliance that has revolutionized the user experience of a mobile device. Android is the platform that powers millions and millions of mobile devices in nearly 200 countries all around the world. Android can bring you games, apps, books, movies, music and similar digital content.

Agenda

Day	9:30-11:00		11:15-12:45		15:00-16.15		16:30-18:00
1	Introduction to Android	Break	How to Install Android Studio, Android SDK, API version	Break	Introduction to Components of Android and functionality	Break	Activity (Create Activity, Life cycle of Activity, Property and Behavior of Activity)
2	Create Android Hello World Project and Explanation of Project Structure		Introduction to android UI and UI component for Layout Design		Introduction to android UI and UI component for Layout Design		Create LOGIN and Register UI Screen (Form Design)
3	Introduction to SQ-Lite Database and Operations of DB		Introduction to HTTP URL Request (API call to Server / Cloud Server)		Http URL Request Using POST / GET /PUT/DELETE method		Upload / Download Image / Doc form android App to Server/ Cloud Server



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4	Introductio n List View and Recycler View		Get Data Image and Data from API and Display in Recycler View		Introduction to Adapter and Model Class		Working with Multi- Threading
5	Design Material Navigation Drawer Design like Gmail Navigation Drawer		Design and set Item		Expandabl e List Items.		Demonstration of apps
6	GPS and Google Map Integration		Location Example		Android Push Notification		Introduction to Fire Base
7	Social Media Sign-In and Login (Face Book/ Google Integration and Development)	Break	Social Media Sign- In and Login (Face Book/ Google Integration and Development)	Break	Android Web view and Web Page Display	Break	Android Web view and Web Page Display
8	Payment Gateway Integration (Example of PayPal and Other Payment Gateway)		Payment Gateway Integration (Example of PayPal and Other Payment Gateway)		Payment Getaway Integration (Example of PayPal and Other Payment Gateway)		Payment Getaway Integration (Example of PayPal and Other Payment Gateway)



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9	Real-time App Development and Practical Session (Ecommerce App Demo, Shopping App Demo)	Real-time App Development and Practical Session (Ecommerce App Demo, Shopping App Demo)	Real-time App Development and Practical Session (Ecommerce App Demo, Shopping App Demo)	Real-time App Development and Practical Session (Ecommerce App Demo, Shopping App Demo)
10	Introduction to Play Store and App Publishing (Create Account in Play Store and Make App Build)	Introduction to Play Store and App Publishing (Create Account in Play Store and Make App Build)	Questioner & doubt clear session	Reference Document and Source Links

Prerequisites for attendees:

- Working knowledge of C, Core Java knowledge.

System Requirements:

- Win 7, Win 8 or Win 10 (32bit / 64bit) operating system with minimum 1024 * 768 monitor resolution