

# Computer Collegiate

## Introduction to Android Application Development

Interested in learning how to develop Android App? This Android training course is designed to quickly get you up to speed how to develop Android apps for Android devices. This Android development training course will you teach you the basis of Android platform and application lifecycle. You will be able to write simple GUI applications, use built-in widgets and component, work with database to store data locally, and much more by the end of this Android training course.

**Pre-Requisites:** Experience in Object Oriented Programming (preferably java).

Knowledge in XML format

### Couse Content

#### Lesson 1: Getting Started with Android Programming

- What is Android?
- Obtaining the Required Tools
- Setting up Development Environment
- Creating Your First Android Application

#### Anatomy of an Android Application

#### Lesson 2: Introduction to User Interface Widgets

- Creating simple Application using:
  - Text Control
  - Button Control
  - Toggle Button Control
  - Layout Resources

#### Lesson 3: Architecture

- Application Context
- What are Intents, Activities and Android Manifest?
- Activity Lifecycle
- Working with multiple activities

#### Lesson 4: Basic User Interface Widgets

Text View  
Edit View  
AutoComplete Edit  
Button  
Image Button  
Spinner  
Checkbox  
Radio Buttons and Groups  
Date and Time Pickers  
Clocks  
Images

#### Lesson 5: Working with Menus

- Options Menu
- Context Menu
- Sub Menu

#### Lesson 6: Working with Dialogs

- Popup
- Alerts & Toast

## **Lesson 7: Basic Working with ListActivity and ListView**

## **Lesson 8: Working with Media**

- Using camera
- Playing Audio
- Audio Manager Method
- Lots more

## **Lesson 9: Working with Google Maps Api**

## **Lesson 10: Working with Data Storage**

- The Android File System
- File Output Stream for Internal Storage
- Writing Data to File Output Stream
- Shared Preferences
- Shared Preferences Resources

## **Lesson 11: Working with SQL-Lite**

- Table-Layout and Intro SQLite Database
- Setting up SQLite Database Variables
- Creating SQLite Database
- Opening SQLite database to write
- Closing SQLite Database
- Inserting Data into SQLite Database
- Setting up method to Read SQLite
- Reading SQLite Database with Cursor
- Setting up more SQLite methods
- Getting a Specific Entry
- Updating SQLite Entry
- Deleting Entry from SQLite Database

## **Lesson 10: Working with Services**

- Calling Services
- Parsing JSON Data
- Parsing XML