



# Course Outline

Basic Android  
Training

# Pre-requisites

## ✓ Installing JDK, Android Studio, Emulators

Walkthrough of the process on installing the Java Development Kit, Android Studio IDE, and the Genymotion emulator.

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- ✓ Introduction 
  - ✓ Windows: Install Java Development Kit 
  - ✓ Mac: Install Java Development Kit 
  - ✓ Windows: Guide to Install Android Studio 
  - ✓ Mac: Guide to Install Android Studio 
  - ✓ Hello, World: Create a New Project 
  - ✓ Running Hello World On Your Phone 
  - ✓ Running Hello World On The Emulator 



# Day 1

## ✓ Android Project Anatomy

Open the Hello World project created as part of the pre-requisites and discuss the following:

<https://docs.google.com/presentation/d/1jGO0pKrr7mkQY4i3JqlvScP82DXLulKp8GXYljJvc4k/edit#slide=id.p>

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- ✓ Android Project Structure (src, res, AndroidManifest.xml, etc.)
  - ✓ Gradle Build File
  - ✓ Android Manifest
  - ✓ Android Studio IDE
- 



# Day 1



## Android Views Fundamentals

- 1) Let us talk about the commonly used views that any Android apps can't live without.
- 2) How do you capture and handle the events thrown by each views.



TextView



ScrollView



EditText



TextWatcher



Button



ToggleButton



CheckBox, RadioButton and RadioGroup



SeekBar



Units of Measurement (dp && sp)



# Day 2



## Android Layout Fundamentals

Discuss the most commonly used container layouts or ViewGroups in Android.



Introduction



LinearLayout



RelativeLayout



FrameLayout



TableLayout



Choosing the Right Layout



# Day 3

## ✓ In-Depth Activity

We'll get to know what Activity is.

- Its Importance
- Passing Data from one activity to another via Intents
- Its Lifecycle
- Changing View States

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✓ Explicit Intents

✓ Implicit Intents

✓ Activity Lifecycle

✓ Managing Configuration Change States

✓ Activity Backstack

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# Day 4

## ✓ Adapters

How do you display large amounts of data?

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- ✓ Adapters and Adapter Views
  - ✓ ListView
  - ✓ GridView
  - ✓ Custom Adapters
  - ✓ View Holder Pattern
  - ✓ One ListView with multiple view types
  - ✓ RecyclerView with CardView
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# Day 5

## ✓ Android Data Storage and Persistence

We will talk about how android manages offline data.

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✓ Shared Preferences

✓ SQLite Databases

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# Source Code Samples

<https://github.com/basicdroid>



