

# Content

TOPIC S NO	TOPICS TO BE COVERED
1	<b>JAVA Concepts</b>
	<ul style="list-style-type: none"> <li>• OOPs Concepts</li> <li>• Inheritance in Detail</li> <li>• Exception Handling</li> <li>• Packages &amp; Interfaces</li> <li>• JVM &amp; Jar File ERxtensions</li> <li>• Collections-Hash Table Vector List, Array List, Hash Map</li> <li>• Multithreading (Thread Class &amp; Runnable Interface)</li> </ul>
2	<b>SQL</b>
	<ul style="list-style-type: none"> <li>• DDL &amp; DML Queries in brief</li> </ul>
3	<b>Introduction to Android</b>
	<ul style="list-style-type: none"> <li>• What is Android ?</li> <li>• Setting up Development Environment</li> <li>• Dalvik Virtual Machine &amp; .apk file extension</li> <li>• Fundamentals:               <ul style="list-style-type: none"> <li>(a) Basic Building blocks-Activities, Services,Broadcast Receivers &amp; Content Providers</li> <li>(b) UI Components- Views and notifications</li> <li>(c) Components for communication- Intents &amp; Intents Filters</li> </ul> </li> <li>• Android API Levels (version and version names)</li> </ul>
4	<b>Application Structure(in detail)</b>
	<ul style="list-style-type: none"> <li>• AndroidManifest.xml               <ul style="list-style-type: none"> <li>a) uses-permissions &amp; uses-sdk</li> <li>b) Activity/Services/Receiver Declarations</li> </ul> </li> <li>• Resources &amp; R.java</li> <li>• Assets value-string.xml</li> <li>• Layouts and drawable resources</li> <li>• Activity and Activity Lifecycle</li> <li>• First Sample Application</li> <li>• Deploying sample application on a device</li> </ul>
5	<b>Emulator-Android Virtual Device</b>
	<ul style="list-style-type: none"> <li>• Launching Emulator Editing</li> <li>• Emulator Settings</li> <li>• Emulator Shortcuts</li> <li>• Logcat Usage</li> <li>• Introduction to DDMSFile Explorer</li> <li>• Second App-(switching between activities)</li> <li>• Develop an app for demonstrating the communication between Intents</li> </ul>

6	<b>Basic UI design</b>
	<ul style="list-style-type: none"> <li>• Form Widgets Text</li> <li>• Fields Layout               <ul style="list-style-type: none"> <li>a) Relative Layout, Table Layout, Frame LayoutLinear Layout</li> <li>b) Nested Layouts</li> </ul> </li> <li>• [dip,dp,sip,sp] versus px</li> <li>• Examples</li> </ul>
7	<b>Preferences</b>
	<ul style="list-style-type: none"> <li>• Shared Preferences</li> <li>• Preferences from XML</li> <li>• Examples</li> </ul>
8	<b>Menu</b>
	<ul style="list-style-type: none"> <li>• Option Menu</li> <li>• Context Menu</li> <li>• Sub Menu</li> <li>• Menu from XML</li> <li>• Menu via Code</li> <li>• Examples</li> </ul>
9	<b>Intents in Detail</b>
	<ul style="list-style-type: none"> <li>• Explicit Intents</li> <li>• Implicit Intents</li> <li>• Examples</li> </ul>
10	<b>UI Design</b>
	<ul style="list-style-type: none"> <li>• Time and Date</li> <li>• Images and Media</li> <li>• Composite Alert Dialog &amp; Toast Popup</li> <li>• Examples</li> </ul>
11	<b>Tabs and Tab Activity</b>
	<ul style="list-style-type: none"> <li>• Examples</li> </ul>
12	<b>Styles &amp; Themes</b>
	<ul style="list-style-type: none"> <li>• Styles.xml</li> <li>• Colors.xml</li> <li>• Declaring colors &amp; Drawables</li> <li>• Drawable resources for Shapes</li> <li>• Gradients (selectors)               <ul style="list-style-type: none"> <li>a) Shape Drawables</li> <li>b) State Drawables</li> <li>c) Transition Drawables</li> <li>d) 9 Patch</li> </ul> </li> <li>• Drawables Styles</li> <li>• Attribute in layout file</li> <li>• Applying themes via code and manifest file</li> <li>• Examples</li> </ul>

13	<b>SQLite Programming</b>
	<ul style="list-style-type: none"> <li>• SQLite Programming</li> <li>• SQLite Open Helper</li> <li>• SQLite Database</li> <li>• Cursor</li> <li>• Content Providers</li> </ul>
	a) Defining and using content providers b) Example-sharing database among two different applications using <ul style="list-style-type: none"> <li>• Reading and Updating Contacts</li> <li>• Reading Bookmarks</li> <li>• Example</li> </ul>
14	<b>Android Debug Bridge (ADB Tool)</b>
	<b>Linkify</b>
15	<ul style="list-style-type: none"> <li>• Web URLs, Email Address, text, map address, phone numbers</li> <li>• Match filter and Transform filter</li> <li>• Examples</li> </ul>
	<b>Adapters &amp; Widgets</b>
16	<ul style="list-style-type: none"> <li>• Adapters               <ul style="list-style-type: none"> <li>c) Array Adapters</li> <li>d) Base Adapters</li> </ul> </li> <li>• Example-Efficient Adapter</li> <li>• List View &amp; List Activity</li> <li>• Custom List View</li> <li>• Grid View using Adapters</li> <li>• Gallery using Adapters</li> <li>• Example</li> </ul>
	<b>Notifications</b>
17	<ul style="list-style-type: none"> <li>• Broadcast Receivers</li> <li>• Services and Notifications</li> <li>• Toast Alarms</li> <li>• Examples</li> </ul>
	<b>Custom Components</b>
18	<ul style="list-style-type: none"> <li>• Custom Toast</li> <li>• Custom Dialog</li> <li>• Custom Tabs</li> <li>• Custom Animated Popup</li> <li>• Panels</li> <li>• Other Components</li> <li>• Examples</li> </ul>
	<b>Threads</b>
19	<ul style="list-style-type: none"> <li>• Threads running on UI</li> <li>• Thread (run on UI thread) Worker Thread</li> <li>• Handlers &amp; RunnableAsyncTask (in detail)</li> <li>• Examples</li> </ul>

20	<b>Audio, Video and Camera</b>
	<ul style="list-style-type: none"> <li>• Introducing Media Player</li> <li>• Playing Audio</li> <li>• Recording Audio</li> <li>• Preparing Audio and Video for playback</li> <li>• VideoView</li> <li>• Using Camera for Taking Pictures</li> </ul>
21	<b>Access to Google Maps</b>
	<ul style="list-style-type: none"> <li>• Introducing Google Maps</li> <li>• Using Map Controller</li> <li>• Getting Map API Key</li> </ul>

22	<b>Project</b>
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