

TECHGENX

Android+Java

Please Note: All below course content will be covered in practical scenarios and regular assignments will be shared. All sessions will be recorded and shared with student for future reference (free of cost). Along with below course.

1. Core Java -Getting Started

1. Setting up Java in Windows OS
2. Writing your First Java Program
3. Java Method
4. Constructor in Java
5. Java Access Modifiers – public, protected, private and default
6. Java for loop
7. Java while loop
8. Java do while loop
9. Java static keyword
10. Java break keyword
11. Java continue keyword

2. Core Java– Object Oriented Concepts

12. OOPS Concepts
13. Composition in Java
14. Inheritance in Java
15. Composition vs Inheritance in Java
16. Java Nested Classes

3. Core Java – Data Types and Operators

- 17.** Java Data Types, Primitives and Binary Literals
- 18.** Java Autoboxing and Unboxing
- 19.** Java Wrapper Classes
- 20.** Java Ternary Operator

4. Core Java – Interface, Abstract Class

- 21.** Abstract Class in Java
- 22.** Interface in Java
- 23.** Difference between Abstract Class and Interface in Java

5. Core Java – String Manipulation

- 24.** Why String is immutable and final?
- 25.** Understanding Java String Pool
- 26.** Java String subsequence example
- 27.** Java String compareTo example
- 28.** Java String substring example
- 29.** Converting String to char and vice versa
- 30.** Java Split String example
- 31.** String to byte array and vice versa
- 32.** String to char array
- 33.** Java String concatenation
- 34.** String, StringBuffer and StringBuilder in Java
- 35.** String Programs in Java

6. Core Java – Arrays

- 36.** Initializing an Array in Java
- 37.** Two dimensional array in java
- 38.** Java Array of ArrayList
- 39.** String to String Array Example
- 40.** Java Variable Arguments Explained

- 41. Java Array add elements
- 42. Sorting an Array in Java
- 43. Java String Array to String
- 44. Java ArrayList to Array
- 45. Converting Array to ArrayList in Java
- 46. How to copy arrays in Java

7. Core Java – Annotation and Enum

- 47. Java Annotations
- 48. Java @Override Annotation
- 49. Java Enum

8. Basics of Android

- 50. What is Android
- 51. History and Version
- 52. Installing softwares
- 53. Setup Eclipse
- 54. Hello Android example
- 55. Internal Details
- 56. Dalvik VM
- 57. Software Stack
- 58. Android Core Building Blocks
- 59. Android Emulator
- 60. AndroidManifest.xml
- 61. R.java file
- 62. Hide Title Bar
- 63. Screen Orientation

9. UI Widgets

- 64. Working with Button
- 65. Toast
- 66. Custom Toast
- 67. Button

- 68. Toggle Button
- 69. Switch Button
- 70. Image Button
- 71. CheckBox
- 72. AlertDialog
- 73. Spinner
- 74. AutoCompleteTextView
- 75. RatingBar
- 76. DatePicker
- 77. TimePicker
- 78. ProgressBar
- 79. Quick Contact Budge
- 80. Analog Clock and Digital Clock
- 81. Working with hardware
- 82. Button File Download

10. Activity, Intent & Fragment

- 83. Activity Lifecycle
- 84. Activity Example
- 85. Implicit Intent
- 86. Explicit Intent
- 87. Fragment Lifecycle
- 88. Fragment Example
- 89. Dynamic Fragment

11. Android Menu

- 90. Option Menu
- 91. Context Menu
- 92. Popup Menu

12. Layout Manager

- 93. Relative Layout
- 94. Linear Layout
- 95. Table Layout
- 96. Grid Layout

13. Adaptor

- 97.** Array Adaptor
- 98.** ArrayList Adaptor
- 99.** Base Adaptor
- 100.** Recycler Adapter

14. View

- 101.** GridView
- 102.** WebView
- 103.** ScrollView
- 104.** SearchView
- 105.** TabHost
- 106.** DynamicListView
- 107.** ExpandedListView

Advance Android

15. Android Service

- 108.** Android Service
- 109.** Android Service API
- 110.** Android Started Service
- 111.** Android Bound Service
- 112.** Android Service Lifecycle
- 113.** Android Service Example

16. Data Storage

- 114.** Shared Preferences
- 115.** Internal Storage
- 116.** External Storage

17. SQLite

- 117.** SQLite API
- 118.** SQLite Spinner
- 119.** SQLite ListView

18. XML & JSON

- 120.** XML Parsing SAX
- 121.** XML Parsing DOM
- 122.** XML Pull Parser
- 123.** JSON Parsing

19. Content Provider

- 124.** Content Provider Fundamental
- 125.** Contact Content Provider
- 126.** Other Built-in Content Providers
- 127.** Creating Custom Content Provider
- 128.** Understanding Content URI
- 129.** ContentResolver
- 130.** Sharing Information from custom content provider

20. Android Notification

- 131.** Notification API
- 132.** Creating Notification Builder
- 133.** Setting Notification Properties
- 134.** Attaching Actions
- 135.** Issuing Notification
- 136.** NotificationCompat.Builder class
- 137.** Android Notification Examples

21. Multimedia

- 138.** Wallpaper
- 139.** Live Wallpaper
- 140.** Multimedia API
- 141.** Playing Audio
- 142.** Creating Audio Player
- 143.** Playing Video
- 144.** Alarmmanager
- 145.** Gallery

22. Speech API

- 146.** TextToSpeech API
- 147.** TextToSpeech Example

- 148. Managing speed and
- 149. pitch Speech To Text

23.Telephony API

- 150. Telephony Manager
- 151. Get Call State
- 152. Call State BroadcastReceiver
- 153. Simple Caller Talker
- 154. Making Phone Call
- 155. Send SMS
- 156. Send Email

24. Location API

- 157. Location API Fundamental
- 158. Example of Android Location API
- 159. Working with Google Maps

25. Animation

- 160. Android Animation API
- 161. Android Drawable class
- 162. Android Animation Example
- 163. Android Rotate Animation
- 164. Android Fade Animation
- 165. Android Zoom Animation

26. Device Connectivity

- 166. Bluetooth Tutorial
- 167. List Paired Devices
- 168. Working with WiFi
- 169. Working with Camera

27. Sensor

- 170. Sensor API
- 171. Motion Sensor
- 172. Position Sensor
- 173. Environmental Sensor
- 174. Sensor Values
- 175. SensorManager class

- 176. Sensor Class
- 177. SensorEvent class
- 178. SensorEventListener interface
- 179. Compass Accelerometer and Orientation Sensors Sensor Examples

28. Android Graphics

- 180. Graphics API
- 181. 2D Graphics
- 182. Android.graphics.
- 183. Canvas android
- 184. Graphics.Paint class

29. Android P2P Communication

- 185. Introducing Instant Messaging
- 186. Using the GTalk Service
- 187. Monitoring the Roste for Changes
- 188. Sending and Receiving Data Messages
- 189. Transmitting Data Messages
- 190. Receiving Data Messages

30. Android Web Services

- 191. What is web service
- 192. Soap Vs Restful web service
- 193. Android Restful web service example with java servlet
- 194. Storing data into external oracle database
- 195. Verifying data in android with external oracle database

31. Android Google Map

- 196. Android Map V2 API
- 197. Adding Map
- 198. Customising Map
- 199. GoogleMap class
- 200. Android Google Map Application