

Java for Android

Introduction to Java/JVM

- JVM- The heart of Java
- Java's Magic Byte code

Language Fundamentals

- Data Types – Integer, Float, Double, String, Boolean
- Variables, keywords, Literals
- Comments
- Assignments & Initialization
- Conditional Statements
 - If-Else statement
 - Switch Case statements
- Loops – For & While loops

Eclipse Development Environment

- Creating Hello World program in Eclipse
- Navigating through Eclipse
 - Editors
 - Views
 - Comments
 - Javadoc
 - Debugger
- Eclipse Tips & Tricks

Quick Review of OOP Concepts

- Inheritance
- Polymorphism
- Abstraction
- Encapsulation
- Class Fundamentals
 - Class, Object
 - Global variable and member variables
 - Static and final
 - Inner and Anonymous Class
 - Access Control Modifiers
 - Constructors
 - Getter/Setter methods

Exception Handling

- Difference between Compile & Runtime Exceptions
- Handling Exceptions
- Why should we handle Exception

Multithreading - Threads & Background tasks

- What is Multithreading
- Threading concepts – Lifecycle, priorities, deadlock
- Creating multithreaded programs
- Synchronizing Threads
- Executors

Java Collection Framework

- Arrays
- Lists
- Queues
- Maps
- Sets
- Tree
- Sorting
- Iterators