Java Programming Course Brochure

Course Highlights

- Core Java (Basics to Advanced)
- OOP Concepts
- Exception Handling
- Multithreading
- Collections & JDBC
- Hands-on Projects

Course Details

- Duration: 8 Weeks
- Mode: Online/Offline
- Eligibility: Students & Professionals
- Certificate on Completion
- Placement Guidance

Full Syllabus

- 1. INTRODUCTION: What is Java, Features, History, Software Installation
- 2. JDK, JRE AND JVM: Structure and Internal Work
- 3. FIRST PROGRAM USING COMMANDS: Hello World
- 4. IDE DETAILS: Program using IDE
- 5. VARIABLES AND DATA TYPES: Types, Programs
- 6. OPERATORS: Casting and Operators
- 7. OPERATORS & DATA TYPES PROGRAMS: Logical Programs
- 8. UNICODE & NAMING CONVENTION
- 9. JAVA KEYWORDS
- 10. CONTROL STATEMENTS: Conditional, Loop, Break
- 11. CONDITIONAL STATEMENTS PROGRAM: if, if-else, nested
- 12. TERNARY AND SWITCH STATEMENT
- 13. LOOPS: While, Do-While, For, Nested, Break/Continue, ForEach
- 14. ARRAY: 1D, 2D, Multi-D, Arrays Functions, Logical Programs
- 15. JAVA OOPS CONCEPTS: Constructors, Methods, Advantages
- 16. INHERITANCE: Types, this/super
- 17. ABSTRACTION: Interfaces, Differences
- 18. POLYMORPHISM: Overloading, Overriding, Static/Dynamic Binding
- 19. ENCAPSULATION: Packages, Access Modifiers
- 20. METHODS: Method Chaining, Object Cloning, Recursion
- 21. WRAPPER CLASS: Type Casting, Call by Value
- 22. STRING: Immutable Class, Methods
- 23. STRING PROGRAMS
- 24. STRING BUFFER: Differences, Programs
- 25. STRING BUILDER: Differences, Programs
- 26. EXCEPTION HANDLING: Try/Catch, Multiple Catch
- 27. NESTED TRY/CATCH, FINALLY BLOCK
- 28. CUSTOM EXCEPTION: throw/throws, Propagation
- 29. MULTITHREADING: Life Cycle, Synchronization, Thread Pooling
- 30. JAVA I/O: Streams, Readers, Writers, Serialization
- 31. COLLECTION: Framework, Methods
- 32. LIST: ArrayList, LinkedList, Vector, Stack

- 33. SET: HashSet, LinkedHashSet, TreeSet
- 34. MYSQL: Installation, Queries, Joins, Triggers, Stored Procedures
- 35. JDBC: Drivers, Connectivity, PreparedStatement, Transactions
- 36. HTML: Tags, Tables, Forms
- 37. CSS: Selectors, Box Model, Positioning
- 38. JAVASCRIPT: Variables, Loops, DOM, Events
- 39. ADVANCE JAVA: Spring, Stream API, Microservices
- 40. CAPSTONE PROJECTS: E-Learning, Weather Prediction, E-Commerce, Hospital System