About Java

Introduction

Java is a programming language and computing platform first released by Sun Microsystems in 1995. It has evolved from humble beginnings to power a large share of today's digital world, by providing the reliable platform upon which many services and applications are built. New, innovative products and digital services designed for the future continue to rely on Java, as well.

Why Java

- Java is free to download for personal use
- Java is also free for development
- Java is simple
- Java is platform-independent

Topics covered in Core JAVA Course

- Java Fundamentals
- Functions
- Object oriented Programming
- Exception Handling
- Thread handling

Course Syllabus in details

CORE JAVA

1.1. Introduction To Java
1.2. Java History
1.3. Why Java
1.4. Features of Java
1.5. Environment Setup
1.6. Hello World Application
1.7. Java Program Internal

1.8. JDK, JRE, JVM
1.9. JVM- Java Virtual Machine
1.10. Class, Objects, Data Types
1.11. Variables
1.12. Type Casting
1.13. Operators
1.14. Java Comments
1.15. Object Oriented Programming Concepts
1. Abstraction
2. Encapsulation
3. Polymorphism
4. Inheritance
1.16. Java Coding Standards
1.17. Package – Creating package, naming package
1.18. Java Keywords
1.19. Access Specifiers – Public, Private, Protected, Default
1.20. Static Concept – Block, Variable, Method, Class
1.21. Scanner Class
1.22. Control Statement – If, If…else, Nested if…else and Switch Case
1.23. Java Break Statement
1.24. Java Continue Statement
1.25. Flow Statement- for, while, do..while
1.26. Constructor- Default, Parameterized
1.27. Inheritance
1.28. Extends, super and this keyword
1.29. Method Overloading, Method Overriding
1.30. Interface
1.31. Abstract Class
1.32. Abstract Class vs Interface
1.33. Garbage Collection
1.34. Serialisation
1.35. Java instanceof
1.36. Instance initializer block
1.37. Volatile Keyword in Java
1.38. Exception Handling

1.39. Exception Handling- try, catch, throw, throws, finally
1.40. String Concept
String Basics
String Methods
1.41. String Buffer
1.42. String Builder
1.43. Custom Immutable Class
1.44. Java - Arrays
1.45. Collection
Framework
Collection Basics
Iterator Interface
Methods of Collection Interface

1. List
A] Array List B] Linked List C] Vector
2. Set
A] Hash Set B] Tree Set
3. Map
A] Hash Map B] Tree Map C] Hashable

1.46. Collection Framework Advance Concepts
1. Comparable Interface
2. Comparator Interface
3. Collections class
4. Differentiate Comparable and Comparator
1.47. Java Enum
1.48. Date Concept
1.49. File Handling Concept
1. File Handling Basics
2. Create Folder
3. Create File- .txt. .pdf, .xlsx, .docs, etc
4. Write File
5. Read File
6. Delete File
1.50. Thread

1. Concept, Lifecycle
2. Extends Thread
3. Implement Runnable Interface
4. Thread Priorities
5. Thread Methods

1.51. Multithreading

1.52. Thread Synchronisation

1. Synchronisation
2. Object Locking
3. Inter Thread Communication

1.53. JDK 1.8.0 New Features with Hands-on
1. Lambda Expression
2. Functional Interface
3. Default Method in Interface
4. Static Method in Interface
5. Method References
6. Date Time API
7. Stream API
8. Collectors
9. For each Loop
10. String Joiner Class
11. Parallel Sort
12. Optional Class

1.54. Java Mail API- Real Time Live

Implementation Programming practices, Concepts &

Interview