

Core Java Training Topics

Core Java Training Course Objective

To teach fundamentals of Java programming language and how to utilize Java for writing applications. Here is the course outline of Core Java Training.

Eligibility

Only basic knowledge of programming and working knowledge of computer.

Core Java Training Course Outline

1. Fundamentals of the Java Programming Language

- Object-Oriented concepts
- Syntax (Data Type, Variables, Array, Casting)
- Operators (Arithmetic, bitwise, relational, logical, assignment)
- Selection Statements (If, Switch)
- Control Statement (while, do while, for)
- Conditional Statements
- Arrays

2. Java Programming Language

- What is class and Objects
- Class and Methods
- Inheritance Basics and Inheritance with packages
- Packages and Interfaces
- Exception Handling
- Abstract Window Toolkit (AWT)
- Threads
- Sockets
- Networking
 - Overview of Networking
 - Networking Concepts
 - Identifying Your Computer's IP Address
 - Using the InetAddress Class
 - Sockets
 - Implementing the Client Side of a Socket
 - Implementing the Server Side of a Socket
 - Using the Remote File Copy Application
 - Datagram Sockets
 - Using Datagram Sockets

3. New Features of the Java SE Platform

- Scripting
- Desktop Client
- Swing
- JAX-WS
- JAXB
- JAXP
- JMX
- Jconsole
- Dtrace Performance
- Security

4. J2SE Platform 5.0 : Language Changes

- Generics
- Autoboxing
- Enums
- Varargs
- Static Imports
- Annotations
- Concurrency

5. Object-Oriented Analysis and Design Using UML

- Object Oriented Analysis
- UML
- Dynamic model
- Design Patterns
- Partitioning

6. Java Programming Language Workshop

- Multi-tier applications
- JDBC
 - SQL Language
 - JDBC and its drivers
 - JDBC API: connections, statements, result sets, metadata
 - Using JDBC: updates, queries
- Design patterns
- Java RMI

7. Developing Real-Time Programming Application

- Application 1
- Application 2
- Application 3

8. Introduction to Developing Rich-Client Applications

- Application using GUI design
- Application using Swing API