



JAVA COURSE CONTENTS

CORE JAVA

1. JAVASE 6 & J2SE 5.0

- How to Install Java and about Environment Variables
- JVM Architecture
- Data types, Variables, Keywords and Identifiers
- Operators and Expressions, Naming Conventions in Java
- Control Flow Statements
- Arrays
- Command Line Arguments Object and Class
- Object Oriented Programming (OOP) Inheritance
- Interfaces
- Abstract Classes, Inner Classes
- Access Specifiers, Access Modifiers Packages
- Collection Framework Exception Handling
- Multi-Threading
- Input/output Streams
- Networking
- AWT, Applets and Swings

2. ADVANCED JAVA

1. JDBC 4.0

- Introduction to JDBC JDBC architecture java.sql Package
- Connection, Statement, ResultSet Prepared Statement
- Callable Statement
- Scrollable and Updatable ResultSet Batch Updates
- ResultSetMetaData
- Simple Transaction Management
- Four Levels of JDBC drivers, their pros & cons
- Features of JDBC 3.0

2. Servlets 3.0

- Need of Server side Programming
- Introduction to Servlets
- Servlet Life Cycle
- servlet package
- ServletConfig, ServletContext, ServletResponse
- Supplying initialization parameters to Servlets
- Performing database operations in Servlets
- Include and forward mechanisms

- Applying filters to Servlets
- servlet.http Package
- HttpServlet Life Cycle
- Http request methods GET vs POST
- HttpServletRequest, HttpServletResponse
- Dealing with Http headers & error codes
- Session Tracking, purpose, Hidden form fields, Cookies
- Http Session, URL rewriting, Event listeners
- Web application security

3. JSP 2.2

- Disadvantages of Servlets
- Introduction to JSP
- JSP Life Cycle
- Creating dynamic Web content with JSP
- Scripting elements, Scriptlet, Declaration, Expression
- XML syntax for JSP elements
- JSP directives page, include and taglib
- JSP implicit objects, JSP scopes
- Include and forward mechanism
- Using a Java bean in a jsp
- JSP Model 1 architecture
- JSP Model 2 (MVC) architecture
- Custom Tag Development
- Classic Tags, Simple Tags
- Error Handling in a jsp
- JSTL, Expression Language, Processing XML in a jsp

4. Java EE

- Java Distributed Technology
- RMI Architecture Dynamic / Bootstrap Clients
- Object Passing in RMI
- DGC, Activation
- RMI – IIOP