

Introduction

- Why Java
- Paradigms
- Diff B/W Java & Other (C,C++)
- Java History
- Java Features
- Java programming format
- Java Statements
- Java Data Types

OOPS (Object Oriented Programming & Systems)

- Introduction
- Object
- Constructors
- This Keyword
- Inheritance
- Super KeyWord
- Polymorphism (Overloading & Overriding)
- Abstraction
- Interface
- Encapsulation
- Introduction to all predefined packages
- User Defined Packages
- Access Specifiers

STRING Manipulation

- String
- String Buffer

Array

- What is Array
- Single Dimensional Array
- Multi Dimensional Array
- Sorting of Arrays

Packages

Exception Handling

- Introduction

- Pre Defined Exceptions
- Try-Catch-Finally
- Throws, throw
- User Defined Exception examples

I/O Streams

- Introduction
- Byte-oriented streams
- Character – oriented streams
- File

Multithreading

- Introduction
- Thread Creations
- Thread Life Cycle
- Life Cycle Methods
- Synchronization
- Wait() notify() notify all() methods

Wrapper Classes

- Introduction
- Byte, Short, Integer, Long, Float, Double, Character
- Boolean classes

Inner Classes

- Introduction
- Member Inner Class
- Static Inner Class
- Local Inner Class
- Anonymous Inner Class

Collection Frame Work

- Introduction
- Util Package interfaces, List, Set, Map
- List Interface & Its Classes
- Set Interface & Its Classes
- Map Interface & Its Classes

Advanced Java Syllabus (J2EE Course Syllabus)

Introduction to Enterprise Edition

- Distributed Multi Tier Applications
- J2EE Containers
- Web Services Support
- Packaging Applications
- J2EE 1.4 APIs

Web Server and Application Server

- Tomcat-Introduction
- Overview, installation, Configuring Tomcat
- Jboss server-Introduction
- Overview, installation and Configuration
- Comparison

SQL

- Basics of SQL queries
 - SQL Joins

JDBC

- Introduction
- JDBC Architecture
- Types of Drivers
- Statement
- Result Set
 - Read Only Result Set
 - Updatable Result Set
 - Forward Only Result Set
 - Scrollable Result Set
 - Prepared Statement

Servlets

1. Introduction
2. Web application Architecture
3. HTTP Protocol & HTTP Methods
4. Web Server & Web Container
5. Servlet Interface
6. HTTPServlet
7. GenericServlet
8. Servlet Life Cycle
9. Servlet Config

10. Servlet Context

11. Servlet Communication

- **Servlet-Browser Communication**
 - sendError
 - setHeader
 - sendRedirect
- **Web-Component Communication**
 - Forward
 - Include
- **Servlet-Applet Communication**

12. Session Tracking Mechanisms

- Http Session
- Cookies
- URL-Rewriting
- Hidden-Form Fields

13. Filters & Wrappers

14. Listeners

15 Web-Security

JSP

- Introduction
- Jsp LifeCycle
- Jsp Implicit Objects & Scopes
- Jsp Directives
 - page
 - include
 - taglib

Jsp Scripting Elements

- declaratives
- scriptlets
- expressions

JSP Actions

Standard Actions

- useBean tag
- setProperty tag
- getProperty tag
- include tag
- forward tag

- param tag
- plug-in tag
- params tag
- fallback tag
- directives tag
- scriptlet tag
- expression tag

Custom Actions

- Classic Tags
- Simple Tags

JSTL & Tag Library