

Advance Java Syllabus

Course Duration:3 Months

1. Software Installation

2. SQL

3. HTML

4. CSS

5. Javascript

6. JQuery

7. Bootstrap

8. AJAX

9. JDBC

9.1 Introduction (JDBC features, versions, difference between
jdbc and odbc)

9.2 Jdbc Architecture

9.3 Types of Drivers

9.4. JDBC API

a. java.sql

interfaces : Driver, Connection, Statement, PreparedStatement, CallableStatement,
ResultSet

classes : DriverManager, Date, Time, Timestamp, Types

b. javax.sql

interfaces : DataSource, RowSet, RowSetListener, ConnectionEventListener

classes : RowSetEvent, ConnectionEvent

9.5 Working/Steps with different Drivers (coding)

9.6 Which Driver we have to use ?

9.7 Life cycle of SQL query execution

9.8 Difference between Statement, PreparedStatement &
CallableStatement

9.9 Developer level jdbc connection coding

9.10 Types of ResultSet

9.11 Cursors

9.12 SQL Injection Attack

9.13 Batch Updates

9.14 BLOB & CLOB

9.15 Connection Pooling

9.16 Transaction Management

9.17 SavePoint

9.18 RowSet (Difference between RowSet & ResultSet)

9.19 Insert and retrieve date values

10. SERVLETS

10.1 Basics of Servlet

Servlet Introduction

Servlet API

Servlet Interface

GenericServlet

HttpServlet

Servlet Life Cycle

Working with Apache Tomcat Server

Steps to create a servlet in Tomcat

How servlet works?

Servlet in IDE (Myeclipse, Eclipse, Netbeans)

10.2 Servlet Communication

a. Servlet-Browser communication

1. sendError
2. setHeader
3. sendRedirect

b. Web-component Communication

1. Forward
2. Include

10.3 ServletConfig

ServletConfig methods

ServletConfig example

10.4 ServletContext

ServletContext methods

ServletContext example

10.5 Attribute

How to set, get and remove example?

10.6 Session Tracking Mechanisms

HttpSession

Cookies

URL-Rewriting

Hidden-Form Fields

10.7 Event and Listener

10.8 Filter

Filter

Authentication Filter

FilterConfig

Useful examples

10.9 ServletInputStream and ServletOutputStream

10.10 Annotation Servlet

10.11 Web-Security

11. JSP

11.1 Basics of JSP

Life cycle of JSP

JSP API

JSP in Eclipse and other IDE's

11.2 Scripting elements

scriptlet tag

expression tag

declaration tag

11.3 Nine Implicit Objects

out

request

response

config

application

session

pageContext

page

exception

11.4 Directive Elements

page directive

include directive

taglib directive

11.5 Exception Handling

11.6 Action Elements

jsp:forward

jsp:include

Bean class

jsp:useBean

jsp:setProperty & jsp:getProperty

11.7 Displaying applet in JSP

11.8 Expression Language

11.9 JSTL Tags

11.10 Custom tags

Custom Tag: What and Why?

Custom Tag API?

Custom Tag Example

Attributes

Iteration

Custom URI

12. Design Pattern

MVC

Singleton

DAO

Factory Method etc.

13. SERVERS

Apache Tomcat

Glassfish Server

JBoss Server

Weblogic Server

Real World Project