

Java Training Center, Noida - Java Expert Program

Database Concepts

- Introduction to Database
- Limitation of File system
- Introduction to RDBMS
- Steps to install MySQL and oracle 10g in windows OS
- SQL (Structured Query Language)
- Exploring CURD Operations
- Table Maintenance
- Exploring operators, Aggregate Functions, group BY and having clauses
- Exploring Constraints, Sequence, Sub queries, views, Joins
- User Maintenance
- Alerting Tables
- Exploring Index
- Introduction to PL/SQL
- Exploring PL Statement, Control Statements, Procedures, Triggers

Core Java

- Introduction to java
- Basic Requirements to work with java
- Language
- Object Oriented Programming Concept in java
- Packages
- Exception Handling
- Threading
- Java.util Package
- Java.io Package
- Enums
- Annotation
- Others APIs introduced in Java 7 & 8
- Advance Java

JDBC

- Introduction to JDBC
- Exploring Step by Step to use JDBC in Java application
- Exploring JDBC driver types
- Exploring Type of JDBC Statements
- Exploring Statements
- Exploring Prepared Statements, Callable Statements
- Exploring Batch update, Resultset
- Exploring Meta Data
- Exploring Connection pooling
- Exploring RowSet and Rowset types
- Exploring Transaction, Isolation
- Steps to install JBoss in window machine

Steps to start the JBoss server

SERVLET

- Types of Applications
- Need for Web Applications
- Developing first Servlet Example
- Exploring Various From elements usage
- Type of Parameter
- Servlet Life Cycle
- Servlet modes
- Exploring HttpServlet Request, HttpServlet Response
- Exploring Request dispatcher
- Exploring Http Methods
- Exploring ServletAPI
- Session Management, Servlet Scopes
- Servlet Attributes, Servlet Filters
- Listeners
- MVC Architecture
- Front controller Design Pattern
- Interception Filters

JSP

- Introduction to JSP
- JSP life cycle
- Servlet VS JSP

- JSP Implicit objects
- JSP Scripting Elements
- JSP Directives, JSP Scopes
- JSP Standard Actions
- EL Expressions
- JSTL TAGS
- Custom Tag Development
- JSP Attributes

FrameWorks

STRUTS 1

- Introduction to Struts 1 Frame works
- Step by step Instruction for developing first Struts Example
- Struts Processing Flow
- Performing Validations on input data
- Handling Action Errors in Action Class
- Handling Exception thrown By Action Class
- Struts Layer
- Struts Validations
- Form Beans
- Struts Tag Library
- Struts 1 Actions
- Tiles Frameworks
- Web container Security
- Struts+DAO+JDBC Example

STRUTS 2 SYLLABUS

- Introduction to Struts 2 Frameworks
- Step by step Instruction to develop Struts 2 Example using XML approach
- Step by step Instruction to develop Struts 2 Example using Annotations approach
- Struts 2 Architecture
- Main components of Struts 2
- Struts 2 Request processing Flow
- Struts 2 Action
- Exploring Action context
- Exploring Value Stack
- Exploring OGNL
- Exploring Struts 2 Interceptors
- Using Message Bundles in Struts 2
- File upload Example
- Struts 2 validations
- Struts 2-Tiles Integration
- Struts 2-DAO-JDBC

JSF1/2 SYLLABUS

- Introduction to JSF
- Step by step Instruction to develop First JSF 1.2 Example
- Step by step Instruction to develop First JSF 1.0 Example
- Exploring Faces Context
- Exploring External Context
- JSF Request Processing Flow
- JSF Main elements
- Navigation System
- Validators of JSF
- Convertors of JSF
- Exploring JSF UI Components

- Events and Listeners
- Using Message Bundle in JSF
- JSF-Tiles Integration
- JSF-DAO-JDBC-Example
- Exploring Rich Faces

HIBERNATE SYLLABUS

- Introduction to Hibernate
- Step by step Instruction to develop Hibernate Core Example
- Step by step Instruction to develop Hibernate AnnotationsExample
- Hibernate Features
- DAO + Hibernate (CURD)operation)
- Hibernate Mapping Types
- Working With Primary Keys
- Hibernate Architecture
- Connection Management
- Transaction Management
- Hibernate Query Language
- Hibernate Cache
- Hibernate Filters

SPRING SYLLABUS

- Introduction to Spring
- Spring IOC
- Spring AOP
- Spring Data Access
- Spring Transaction Management
- Spring MVC
- Spring web

- Spring Expression Language
- Spring Security
- Spring Integrations
- JPA Mapping types
- JPA-Query Language
- EJB Container Services
- J2EE Design Patterns

XML & WEbServices

- Introduction to XML
- XML Terminology
- Exploring DTD's
- Exploring SCHEMA's
- JAXP
- JAXB
- Introduction to Distributed Computing
- Introduction to web Services
- Comparing web Services Technologies with EJB,RMI
- web Services standards, Introducing SOAP WSDL \$ UDDI
- Introduction web Services Frame works
- Developing JAX-RPC based web Services using AXISI
- Developing JAX-WS based web Services using Metro
- Developing JAX-WS based web Services using AXISI2
- Developing JAX-WS based web Services using CXF
- Developing JAX-RS based web Services using Jersey
- Developing JAX-RS based web Services using CXF

Servers

- TOMCAT
- WEBLOGIC
- JBOSS

Development Tools

• ANT, LOG4J, MAVEN, JAVASCRIPT, AJAX, JUNIT, CVS, NETBEANS, MYECLIPSE.