

# JAVA Training Syllabus

## Core JAVA

- Introduction,
- Data types and Variables,
- Operators and Expressions,
- Control Flow Statements,
- Methods,
- Object-Oriented,
- Programming,
- Objects and Classes,
- Using Java Objects,
- Inheritance in Java,
- Exception Handling,
- Input/Output Streams,
- Collection Framework,
- Inner Classes,
- Introduction to Threads,
- Interfaces and Abstract Classes,
- Serialization,
- Generics,
- Annotations,
- Reflection

## Servlet

- HTML Forms Servlets
- Overview Servlet Lifecycle:
- init(),
- service(),
- destroy()
- GenericServlet,
- ServletRequest,
- ServletResponse HttpServletResponse,
- HttpServletResponse
- HttpServlet Request-response,
- headers,
- GET,
- POST

## Java Beans

- Enterprise Bean overview
- Types of enterprise beans
- Advantages of enterprise beans
- The Life Cycles of Enterprise Beans
- Working with Session Beans
- Statefull vs. Stateless Session Beans
- Working with Entity Beans Message Driven Beans

## Database and SQL Fundamentals

- Relational Databases and SQL Database,
- Schema,
- Tables,
- Columns and Rows
- DDL & DML Sequences ,
- Stored Procedures Using SQL Terminals

## JavaServer Pages

- Overview JSP architecture ,
- JSP tags and JSP expressions Fixed Template Data ,
- Lifecycle of a JSP Model View Controller (MVC)
- Model 1/Model 2 Architecture Data Sharing among servlets
- JSP Request,
- application,
- session
- and
- page scope JSP implicit objects

## Struts Framework

- What is Struts?
- Struts Architecture Struts classes –
- ActionForward,
- ActionForm,
- ActionServlet,
- Action classes
- Understanding struts-
- config.xml
- Understanding Action Mappings Struts flow with an example application
- Struts Tiles Framework
- Struts Validation Framework
- Internationalizing Struts Application
- Struts with Message Resources

## **JDBC**

- JDBC Fundamentals
- Advanced JDBC
- Introduction to Row Sets
- JDBC classes and
- the java.sql Connecting to databases JDBC design patterns

## **Other J2EE Technologies**

- Hibernate
- Spring framework JSF
- Web services
- SOA,
- SOAP,
- AXIS,
- WSDL,
- UDDI,
- Endpoint &
- Callback AJAX