**Struts Overview**

Struts is the most popular and powerful framework for developing JSP applications. In this training class, experienced Java developers learn how to use Struts and the Model-View-Controller (MVC) design pattern to build scalable, maintainable data-driven Web applications.

**Objectives**  At the end of Struts training course, the participants will be able to:

* The mechanics of the Struts framework, the most popular framework for building JSP applications.
* Understanding of the Model-View-Controller (MVC) design pattern and how it is best applied to Java Web development.
* How to follow proper Struts architecture processes in building their Struts applications.

**Suggested Audience** - The Struts Framework training course is intended for web developers who already have experience with building Java- based web applications and want to learn how to build the next generation of web applications using Struts.

**Duration:** 2 Month

\*\* Project duration may be exceeded by 1 week

**COURSE CONTENT**

1. Revision of Servlet & JSP Introduction to MVC
2. Introduction and setting up Struts2
3. Struts 2 Configuration struts.xml
4. Writing Action classes
5. Understanding Action (interface)
6. ActionSupport class
7. Understanding of results, result types and building our own result types.
8. Object Graph Navigational Language (OGNL)
9. Struts 2 Validation Framework Struts2 Tags
10. Struts 2 File Uploads
11. Internationalization of Struts2 application.
12. Inversion Of Control using Dependency Injection (using the Aware interfaces like RequestAware , SessionAware , ApplicationAware )

**HIBERNATE**

**PREREQUISITES:**

All attendees must have Java JSP, Servlets, JDBC API and Basic Knowledge of xml.

**COURSE CONTENT**

1. What is the problem with JDBC - paradigm mismatch?
2. What is ORM?
3. Understanding different components of Hibernate
4. How to persist objects using Hibernate
5. How to use mapping files, configuration files and Session object
6. Instance states
7. How to generate ID
8. How to implement Inheritance in Hibernate
9. Working with relationship between entities
10. Transactions in Hibernate
11. Querying with HQL (Hibernate Query Language)
12. Named and native queries
13. Working with Criteria Interface