

## **Struts Online Training Content:**

### Struts 1.x

#### **1. Struts Architecture**

- MVC and Model 2
- Command Pattern
- Jakarta Struts
- More XML, Less Java!
- Action Mappings
- JavaBeans in Struts
- Working with Forms
- Validation
- Presentation Technology
- Tiles

#### **2. Action Mappings**

- Command Pattern for Web Applications
- Action Servlet
- Action and Action Mapping
- Struts Configuration
- Selecting a Forward
- Global Forwards
- Declarative Exception Handling
- Global Exception Handlers

#### **3. Forms**

- Working with HTML Forms
- Action Forms a/k/a Form Beans
- Relationship to Input
- Relationship to Actions
- Relationship to the Model
- Relationship to Output
- Dyna Action Form and Map-Backed Forms
- Validation

- Coarse-Grained Form Beans

#### **4. Struts Tag Libraries**

- Building View Components
- Struts Tag Libraries
- Attributes and Struts Expressions
- Building Forms
- `<html:form>`
- `<html:text>` ...etc
- Forms and Form Beans
- Scope and Duration of Form Data
- Managing Hyperlinks
- Error Messages
- Logic Tags

#### **5. The JSP Standard Tag Library**

- JSTL Overview
- JSP Expression Language
- Core Tags
- Formatting Tags
- Indexed Properties and Struts HTML Forms

#### **6. Internationalization and Localization**

- `i18n` in Java
- `i18n` in Actions
- `i18n` in Validation

#### **7. Input Validation**

- Validation in Web Applications
- Validation in Struts
- The Struts Validator Plug-In
- Validating Action Form Subtypes
- Configuring Validation
- Standard Validators
- Rules

- The Action Messages Class
- Is `<html:form>` Necessary?
- Reporting Errors
- Multi-Page Validation
- Client-Side Validation
- Limitations on the Client Side
- Implementing a Validator
- Implementing Action Form validate
- Mapping-Based Validation
- Advanced Configuration

## 8. **Struts Configuration in Depth**

- Wildcards
- Extensions
- The Configuration Object Model
- Subclasses and `<set-property>`
- Plug-Ins
- Integrating Other Frameworks
- Role-Based Security
- Chaining Actions
- The Composable Request Processor Class
- Configuring Command Chains
- Modules

## 9. **Tiles**

- Consistent Look and Feel
- Reusable Layouts and Content
- The Tiles Framework
- Instantiating Layouts
- Body-Wrap Insertions
- Tiles and Style sheets
- Working with Tiles Attributes
- The Tiles Context
- Definitions
- Aggregation and Inheritance
- The Tiles Plug-In
- Forwarding to Definitions

- Performance Considerations

## Struts 2.x

### 1. Introduction to Struts2

- Web applications: a quick study
- Why use a framework for web applications
- The Struts2 framework and the declarative architecture
- The support of annotations

### 2. Actions and Interceptors

- The role of actions
- Implementing and packaging actions
- How to dialogue with data
- The role of interceptors
- Developing and declaring interceptors
- The request/response life cycle

### 3. OGNL (Object-Graph Navigation Language)

- The common tasks in a web application
- Data transfer and type conversion
- The built-in converters
- How to build a custom type converter

### 4. How to validate data

- The validation framework
- Using the built-in rules
- Writing a custom validator
- Writing the actions for validation

### 5. Internationalization

- Java i18n and Struts2 framework
- How to use Struts2 i18n
- The default local determination

## 6. Struts2 integration and the persistence layer

- Using Spring with Struts2
- The concept of injection
- Why use the JPA with Struts2
- Integrating Struts2 with Hibernate

## 7. **Project**

- This Project objective is to display employees, search employee, create employee and Delete employee using MVC architecture in Servlets and JSP.