Complete JavaServer Faces

This comprehensive five-day course shows Java programmers how to build web applications with JavaServer Faces 2.0. We develop the best-practice concepts that are formalized by the JSF architecture, from model/view/controller to the UI component framework and request-handling lifecycle. Students start to discover that there is a "JSF way" of doing things, and learn not just APIs and tag libraries but the habit of slicing application logic into its most reusable forms: managed beans, event listeners, converters, validators, and more. Students also acquire a firm command of JSF development, learning to work with JSF's list and table components, building reusable composite components, and building Ajax applications. Simple, high-level Ajax functionality is covered, and students work more directly with JSF's JavaScript API and resource-management framework.

Course Objectives:

- Describe the purpose and scope of the JSF architecture.
- Build web applications using JSF’s FacesServlet, faces-config.xml, and the JSF request/response lifecycle.
- Use Facelets tag libraries to build JSF views.
- Use managed beans to encapsulate form handling and server-side presentation logic.
- Implement control logic as JSF event listeners or action methods.
- Use validators and converters to implement a validation phase for a JSF application.
- Build composite UI fragments or custom components using Facelets.
- Build Ajax applications with JSF: client-side behaviors and partial requests and responses followed by DOM updates.

Audience: Java programmers wishing to learn JavaServer Faces.

Prerequisites: Java programming experience is required. A general understanding of Servlets and JSP is recommended. Basic knowledge of XML and HTML is helpful.

Number of Days: 5 days

1 **Overview**
Java EE and Web Applications
Perspectives: Servlets and JSP
Perspectives: MVC Frameworks
Perspectives: AWT and JFC
JSF Value Proposition
JSF Configuration
Issues with JSP and JSF
Facelets

2 **Lifecycle**
The JSF Request/Response Cycle
Lifecycle Phases
Phase Listeners
The FacesContext Class
Who Does What
Partial Request Cycles

3 **UI Components**
The UIComponent Class
Behavioral Interfaces
The Core and HTML Tag Libraries
Relationship to CSS
ID vs. Client ID vs. Label
The UISelectItem(s)
Navigating the UI Tree
The binding Attribute

4 **Page Navigation**
View Selection
Navigation Rules
Implicit Navigation