

## JavaServer Faces (JSF) 2.0 Development (3 days hands-on)

This course describes how to create complex Web pages by using JavaServer Faces (JSF) 2.0. Students will learn how to create web pages using the JSF tag libraries, implement event handling in managed beans, and define navigation and configuration information. The course also takes a detailed look at the new support for Facelets, which enables you to create template pages and composition components. Additionally, the course shows how to utilize built-in Ajax support, plus advanced features of the RichFaces library.

### Contents:

- **Introduction to JSF:** Web development concepts; JSF goals and benefits; Architecture of a JSF application; JSF components, managed beans, and configuration files; Building and deploying a JSF application
- **Using JSF Tags:** Recap of JSP tag library concepts; Overview of JSP tag libraries; Defining JSF forms and forms; Input and output tags; Buttons and hyperlinks; Checkbox lists, radio button lists, list boxes, and menus
- **Defining Managed Beans:** MVC concepts; Overview of managed beans; Defining a managed bean; Defining the scope of a managed bean; Mapping beans to UI components; Binding to values and methods; Defining event handlers; Configuring managed beans; Defining dynamic beans
- **JSF Lifecycle:** Overview of the JSF lifecycle; Capturing the original view state; Capturing user input; Validating input; Updating the model; Firing events; Rendering controls
- **Navigating between Pages:** How to control navigational flow with JSF; Defining configuration information for page navigation; Defining unconditional navigation; Defining conditional navigation; Defining a choice of paths
- **Converting and Validating Data:** Conversion and validation in the JSF lifecycle; Conversion concepts; Using built-in converters; Displaying error messages; Defining custom converters; Validation concepts; Using built-in validators; Defining custom validators
- **Data Binding:** Overview of data binding in JSF; Bindable data sources; Binding single-value controls; Overview of data tables; Defining headers, footers, and columns; Defining styles; Supporting editing and sorting
- **Using Facelets:** Overview of Facelets; Defining a Facelets view handler; Defining and using a Facelets template; Using composition controls; Creating custom controls in Facelets
- **Ajax:** Overview of Ajax; Using built-in Ajax features; Making effective use of the RichFaces Ajax library

### Who Should Attend:

Web developers who need to create complex user interfaces by using JSF.

### Prerequisites:

Experience using the Java programming language and familiarity with Web concepts.