



Developing Web Applications using JSF, Java EE 6

This Developing Web Applications Using JSF, Java EE 6 Technologies training will introduce you to the features and functions of the JSF 2.0 technology. By combining expert instruction with participation in hands-on labs, you'll solidify your understanding while expanding your overall skill set.

Learn To:

- Design JSF Pages using facelets.
- Describe the architecture of the JSF web applications.
- Understand the role and structure of Managed Beans.
- Describe the tag libraries supported in Facelets.
- Understand the Unified Expression Language (EL).
- Use Java EE Resources in Managed Beans.
- Understand the navigation evaluation process.
- Use standard data converters and standard data validators.

Perform Hands-On Lab Exercises

By enrolling in this course, you'll get the chance to perform hands-on course lab exercises. Participating in these interactive labs will not only ensure you understand new course material; it will also help you apply what you've learned to tasks you're faced with in your daily job.

Prerequisites

Required Prerequisite

- Have a good understanding of the Java Programming Language
- Understand the fundamentals of web applications and HTTP protocol

Audience

- End User

Objectives

- Design web applications using standard architectures, protocols, technologies and components
- Configure JSF within the Web Container
- Design views using JSF and EL
- Design custom components using Facelets
- Design and develop the model using JavaBeans or Pojos
- Integrate external resources such as JPA within Web Application
- Integrate navigation flow/ redirection
- Integrate models and views using events
- Validate application data
- Application data conversion
- Identify, Capture, and Resolve Errors
- Integrate Security
- Test, package and deploy applications

Topics

- Getting Started with JavaServer Faces
 - Understand common requirements for Web Applications
 - Describe the JSF Web Application framework
 - Describe the architecture of the JSF Web Applications
 - Describe the View Description Language (VDL)
 - Understand the role and structure of Managed Beans
 - Describe navigation rules and cases
 - Walk through a simple JSF web application
- Designing JSF Pages Using Facelets
 - Understand the structure of Facelet pages
 - Use Tag libraries in Facelet Pages
 - Describe the tag libraries supported in Facelets
 - Understand the JSF Core Tag Library
 - Understand the HTML RenderKit Tag Library
 - Understand common attributes of the HTML tags
- Using Managed Beans
 - Define bean properties and bean scopes
 - Declare beans using annotations
 - Bind UI Components with Managed Beans
 - Understand the Unified Expression Language (EL)
 - Work with beans using Expression Language
 - Understand the faces-config.xml Configuration File
 - Configure beans in the faces-config.xml file
 - Use Java EE Resources in Managed Beans
- Designing Navigations
 - Understand the implicit navigation rules in JSF 2.0
 - Understand static and dynamic navigations
 - Configure navigation rules and cases
 - Understand the navigation rule declaration syntax
 - Understand the navigation evaluation process
- Validating and Converting Data
 - Understand the data conversion and validating process
 - Use standard data converters and standard data validators
 - Configure default validators
 - Use JSR-303 Bean Validation

- Work with conversion and validation messages
- Use Error Messages
- Use Resource Bundles in JSF Pages
- Develop custom validators and converters
- Developing Complex Facelet Pages
 - Use the DataTable Component
 - Use the Facelets AJAX tag
 - Understand the Facelets UI Tag Library
 - Understand Facelet Templating
 - Use ui:insert to define templates
 - Use ui:composition to specify the template page
 - Use ut:define to populate the template
- Developing Composite UI Components
 - Understand the concept of composite UI components
 - Understand the elements of a composite component
 - Understand JSF application resource libraries
 - Design composite components
 - Store composite components as resources
 - Use Composite components
- Working with Events
 - Understand the life cycle of JSF request processing
 - Understand life cycle events in JSF
 - Understand value change events
 - Use action events
 - Register event listeners
 - Understand the event model enhancements in JSF 2.0
- Configuring and Deploying JSF Applications
 - Understand JSF Web Application Stages
 - Configure the state maintenance method
 - Understand the application configuration loading process
 - Install and upgrade JSF for a web container
 - Deploy JSF web applications to the web container
 - Test and verify the JSF application
 - Configure security for JSF Web Applications