Introduction to Web Applications development with JSF

Description

This 3-day training teaches the JSF specification, part of Java EE. Its programming model meets all the classic problems of web applications (navigation between pages, conversion and data validation, internationalization, etc..). It also allows to structure their applications according to the MVC pattern for better scalability of your source code. Finally, interfaces built with JSF components can benefit from sophisticated interfaces offered by many vendors.

Course Content

Module 1: Getting Started with JavaServer Faces

- Lesson 1: List common requirements for web applications
- Lesson 2: Describe the JSF Web Application framework
- Lesson 3: Describe the architecture of the JSF Web Applications
- Lesson 4: Describe the development view of a JSF Application
- Lesson 5: Walk through a simple JSF web application
- Lesson 6: Review the lifecycle of a JSF application
- Lesson 7: Create and deploy a simple JSF web application

Module 2: Designing JSF Pages Using Facelets

- Lesson 1: Describe the hierarchy of UI components
- Lesson 2: Evaluate the structure of JSF pages
- Lesson 3: List the tag libraries supported in Facelets
- Lesson 4: Describe the JSF Core Tag Library
- Lesson 5: Describe the HTML RenderKit Tag Library
- Lesson 6: List common attributes of the HTML tags
- Lesson 7: Use common UI components to design Facelets pages

Module 3: Developing Managed Beans

- Lesson 1: Use JSR-299: Context and Dependency Injection (CDI) annotation
- Lesson 2: Declare managed beans using annotations
- Lesson 3: Bind UI Components with Managed Beans
- Lesson 4: Use managed bean scopes, including Flash
- Lesson 5: Use the Unified Expression Language (EL)
- Lesson 6: Use the faces-config.xml Configuration File
- Lesson 7: Configure beans in the faces-config.xml file

Module 4: Working with Navigation

- Lesson 1: Use static and dynamic navigation
- Lesson 2: Define implicit navigation in JSF pages
- Lesson 3: Configure navigation rules and cases
- Lesson 4: Describe the navigation evaluation process
- Lesson 5: Create a bookmarkable view

Module 5: Creating Message Bundles

- Lesson 1: Create a message bundle for multiple languages
- Lesson 2: Use a message bundle
- Lesson 3: Localize an application

Module 6: Using JSF Templates

- Lesson 1: Use the JSF Facelets Tag Library
- Lesson 2: Create a template and apply it to multiple pages
- Lesson 3: Describe how to use a decorator
- Lesson 4: Use the debugging feature built into JSF

Module 7: Converting and Validating Data

- Lesson 1: Describe the data conversion and validation process
- Lesson 2: Use standard data converters and validators
- Lesson 3: Configure default validators
- Lesson 4: Develop and use custom converters and validators
- Lesson 5: Work with data conversion and validation error messages
- Lesson 6: Use Bean Validation (JSR-303)

Module 8: Working with Data Tables

- Lesson 1: Use a Data Table component
- Lesson 2: Use column headers, footers and captions
- Lesson 3: Apply styles to Data Table elements
- Lesson 4: Customize a data table with a scroll bar
- Lesson 5: Enhance a data table with a sort table class

Module 9: Handling Events

- Lesson 1: Describe the JSF Event Model
- Lesson 2: Use action and value Change Events
- Lesson 3: Register event listeners
- Lesson 4: Describe JSF lifecycle events
- Lesson 5: List the Event model enhancements in JSF 2.0

Module 10: Developing Composite Component and Using Ajax

- Lesson 1: Describe the concept of composite UI components
- Lesson 2: List the elements of a composite component
- Lesson 3: Design and implement a composite component
- Lesson 4: Attach validators to a composite component
- Lesson 5: Use the Facelets AJAX tag to perform field validation

Module 11: Configuring and Deploying JSF Applications

- Lesson 1: Describe JSF Web application stages
- Lesson 2: Configure the state maintenance method
- Lesson 3: Describe the application configuration loading process
- Lesson 4: Install and upgrade JSF implementation for a web container
- Lesson 5: Deploy JSF web applications to the web container
- Lesson 6: Configure security for JSF Web Applications

Documentation

- Digital courseware included

Participant profiles

- Developers
- Architects
- Project managers

Prerequisites

- Participants should have followed or have knowledge covered by: [Développement d'EJB 3 en Java EE](#)

Objectives

- Understand the MVC pattern
- Implement of JSF
- Know how to develop applications using JSF

Niveau
Intermédiaire
Classroom Registration Price (CHF)
2300
Virtual Classroom Registration Price (CHF)
2150
Duration (in Days)
3
Reference
JSF