

Introduction to Web Applications development with JSF

Description

This 3-day training introduces you to the fundamentals of JSF, an essential framework in the Java EE environment. It addresses the key needs of modern web application development by providing structure and scalability. With its MVC-based approach, you will learn how to design applications that are well-organized and easy to maintain.

JSF technology simplifies page navigation, data management, and internationalization. It also offers a wide range of advanced graphical features through components provided by third-party vendors. As a result, this JSF training shows you how to build modern interfaces tailored to user expectations. You will benefit from practical guidance to understand the concepts and develop your own web applications.

Course Content

Module 1: Getting Started with JavaServer Faces

- List common requirements for Web applications
- Describe the JSF Web framework
- Describe the architecture of JSF Web applications
- Explain the development of a JSF application
- Walk through a simple JSF Web application
- Examine the JSF application lifecycle
- Create and deploy a simple JSF Web application

Module 2: Designing JSF Pages Using Facelets

- Describe the hierarchy of user interface components
- Evaluate the structure of JSF pages
- List the tag libraries supported in Facelets
- Describe the JSF core tag library
- Describe the HTML RenderKit tag library
- List common attributes of HTML tags
- Use common UI components to design Facelets pages

Module 3: Developing Managed Beans

- Use JSR-299: Context and Dependency Injection (CDI) annotations
- Declare managed beans using annotations
- Bind UI components to managed beans
- Use managed bean scopes, including Flash
- Use the Unified Expression Language (EL)
- Use the faces-config.xml configuration file
- Configure beans in the faces-config.xml file

Module 4: Working with Navigation

- Use static and dynamic navigation
- Define implicit navigation in JSF pages

- Configure navigation rules and cases
- Describe the navigation evaluation process
- Create a bookmarkable view

Module 5: Creating Message Bundles

- Create a message bundle for multiple languages
- Use a message bundle
- Localize an application

Module 6: Using JSF Templates

- Use the JSF Facelets tag library
- Create a template and apply it to multiple pages
- Describe how to use a decorator
- Use the built-in debugging feature in JSF

Module 7: Data Conversion and Validation

- Describe the data conversion and validation process
- Use standard data converters and validators
- Configure default validators
- Develop and use custom converters and validators
- Work with error messages for data conversion and validation
- Use Bean Validation (JSR-303)

Module 8: Working with Data Tables

- Use a Data Table component
- Use column headers, footers, and captions
- Apply styles to data table elements
- Customize a data table with a scroll bar
- Enhance a data table with a sorting class

Module 9: Event Handling

- Describe the JSF event model
- Use Action and Value Change Events
- Register event listeners
- Describe JSF lifecycle events
- List event model enhancements in JSF 2.0

Module 10: Developing Composite Components and Using Ajax

- Describe the concept of composite UI components
- List the elements of a composite component
- Design and implement a composite component
- Attach validators to a composite component
- Use the Facelets AJAX tag for inline validation

Module 11: Configuring and Deploying JSF Applications

- Describe the steps of a JSF Web application
- Configure state management methods

- Explain the application configuration loading process
- Install and upgrade the JSF implementation for a Web container
- Deploy JSF Web applications in the Web container
- Configure security for JSF Web applications

Documentation

- Digital courseware included

Participant profiles

- Java Developers
- Software Architects
- Technical 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

Description

Introductory Training in Web Application Development with JSF

Niveau

Intermédiaire

Classroom Registration Price (CHF)

2300

Virtual Classroom Registration Price (CHF)

2150

Duration (in Days)

3

Reference

JSF