Fast Lane

Java EE 6: Develop Web Applications with JSF (D77738GC10)

ID D77738GC10   **Price** 2,680.- € (VAT excl.)   **Duration** 4 days

Who Should Attend

- Java Developer
- Java EE Developer
- J2EE Developer
- Developer

Course Objectives

- Configure JSF within the Web Container
- Design views using JSF and EL
- Design custom components using Facelets
- Implement templates
- Design and develop the model using beans or Pojos
- Integrate external resources such as JPA within Web Application
- Design web applications using standard architectures, protocols, technologies and components
- Integrate navigation flow/ redirection
- Integrate models and views using events
- Validate application data
- Use application data conversion
- Apply AJAX in a JSF page
- Use HTML5 in JSF applications
- Configure and secure JSF applications
- Use third party libraries

Course Content

JavaServer™ Faces technology, the server-side component framework designed to simplify the development of user interfaces for Java EE applications, has been simplified and improved - especially in the area of page authoring. Explore Facelets, a powerful but lightweight page declaration language, to design JavaServer Faces views using HTML style templates and build component trees.

Learn To:

- Develop JSF pages, page templates, custom and composite components using Facelets.
- Develop CDI named beans.
- Process data conversion and validation.
- Handle events in JSF web applications.
- Design JavaServer Faces (JSF) web applications.

- Use AJAX and create custom components and composite components.

Benefits to You
Enrolling in this course will teach you how to simplify web application development. Facelets will enable you to reuse code through templates. You will also significantly reduce the time needed to develop and deploy user interfaces. Included in Java EE 6, the JSF 2.0 standard further simplifies web application development. Facelets also enable code reuse through templating and reduce the time to develop and deploy user interfaces.

Students Who Can Benefits from this Course

- Java developers responsible for developing and deploying JavaServer Faces (JSF) based web applications
- Java developers pursuing the Oracle Certified Professional, Java Platform, Enterprise Edition 6 JavaServer Faces Developer examination

Detailed Course Outline

Introducing the Course

- Review course objectives
- Review the Java SE and Java EE Curriculum
- Discuss 4 day course schedule
- Get acquainted with other students

Introducing JavaServer Faces (JSF) Technology

- List common requirements for web applications
- Describe the JavaServer Faces (JSF) framework
- Describe the architecture of JSF web applications
- Describe the development view of a JSF application
- Walk through a simple JSF web application
- Review the life cycle of a JSF application
- Create, deploy, and run a simple JSF application

Creating JSF Pages Using Facelets

- Describe the hierarchy of UI components
- Evaluate the structure of JSF pages

- List the tag libraries supported in Facelets
- Describe the HTML render kit tag library
- List common attributes of the HTML tags
- Describe the JSF core tag library
- Use common UI components to design Facelets pages

Developing CDI Named Beans

- Define a managed bean
- Use the JSR-299: Context and Dependency Injection (CDI) annotations
- Bind UI components with CDI beans
- Use the unified Expression Language (EL)
- Use the faces-config.xml configuration file
- Use CDI bean scopes

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

Creating and Adding Message Bundles

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

Using JSF Templates

- Create a template and apply it to multiple pages
- Describe how to use a decorator
- Use debugging to identify issues

Converting and Validating Data

- 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 data conversion and validation error messages
- Use Bean Validation (JSR-303)

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 sort table class
- Add a pager component to the table.

Handling Events

- Describe the JSF Event Model
- Use action and value Change Events
- Register event listeners
- Capture and respond to lifecycle events

Using AJAX and Composite Components with JSF

- Define Asynchronous JavaScript and XML (AJAX)
- Describe how JSF Components can be enhanced with AJAX
- Use the tag
- Describe how AJAX request integrates with the JSF
- Define a composite component
- Create a JSF composite component

Creating Custom Components

- Choose when to use custom component
- Choose when to use a custom renderer
- List the steps for creating a custom component

Working with HTML5 and JSF 2.0

- Examine HTML 5 features
- Leverage HTML 5 JavaScript APIs
- Develop JSF 2.0 Composite Components With HTML 5

Configuring and Securing JSF Applications

- Describe JSF Web application stages
- Configure the state maintenance method
- Describe the application configuration loading process
- Describe container managed security
- Declare user roles and responsibilities
- Configure security for JSF Web Applications
- Use the security API

Using Third Party Library for JSF Development

- List the third party libraries available
- Examine and apply the PrimeFaces library
- Examine the Trinidad library
- Configure and apply Trinidad library
- Develop Mobile ready web applications with Trinidad

Training Centres worldwide

Fast Lane

Excelsiorlaan 28-30
B-1930 Zaventem (Brussels)
Tel. +32 (0)2 609 0093
Fax +32 (0)2 609 0093

info@flane.be, www.flane.be