babbage simmel

Introduction to JavaServer Faces (JSF) 1.2
BSP-1618
Length: 3 days
Price: $1,795.00

Course Description

This course introduces the developer to the JSF architecture and provides the basis for planning developing and deploying Web based applications using the JSF framework After taking this class the developer will be able to quickly construct dynamic serverside web pages using JSF

Course Audience

Participants should already have a solid understanding of Java programming and understand the basics of XML The course also assumes a basic understanding of HTML syntax and JavaServer Pages syntax Understanding of Enterprise Java Beans EJB is also a plus

Course Outline

1 Introduction to JavaServer Faces

What is JavaServer Faces JSF
Why Use JSF
Nature of a JSF Application
The Sun Reference Implementation RI
JSF and MVC
Faces Servlet
Managed Bean
The View
A Simple JSF Application
The Input Form formjsp
The Result thanksjsp
The Controller AddressBean
Page Flow or Navigation Rule
How Does the Application Work
Under the Covers The Rendered Form HTML

Under the Covers The Layout Tree

2 Managed Bean

What is a Managed Bean
Why Do You Need Managed Beans
Managed Bean As a Controller
Registering a Managed Bean
Lifecycle of a Managed Bean
Initializing a Managed Bean
What Scope to Use
Value Binding
Property Data Conversion
Advanced Property Types
Component Binding
Other Binding Types
Basic Input Processing
Advanced Input Processing
JSF Expression Language
Language Basics
Use of Expression in JSF
Basic Expression
Property Access Expression
Map Access Expression
Complex Access Expression
Predefined Objects
Operators

3 User Interface Components

JSF UI Components
JSF Component Tag Libraries
Using the Tag Libraries
HTML Tag Library
Identifying Components
Component Identifier
Client Identifier
Form Input Field Names

Labels and Images
Create a Form
Buttons
Links
Adding Parameters to Links
Text Input
Simple Check Box
Check Box Group
Check Box Group Example
Radio Button
List Boxes
Dynamic List Box
Example
Another Example
JSF Core Library
JSF Core Library Components
JSF Component Model
Base Class Hierarchy
Useful Base Classes
Useful HTML Classes

4 JSF Event Handling

Objectives
Request Processing Phases
Action Request Processing Phases
JSF Event amp Listener Model
JSF Event Classes
Event Classes
Event Classes Hierarchy
Action Event Handling
Action Event Example
Action Listener
Value Change Event
Value Change Event Handler
Listener Classes
Listener Interfaces
Listener Classes Hierarchy

Action Listener Class
Value Change Listener Class
Phase Event Listener
Request Processing Lifecycle
Phase Identifiers

5 JSF Navigation

Objectives
JSF Navigation
Example Action Listener
facesconfigxml File
JSF Navigation
Navigation Rules Example
Choosing Between Redirect amp Direct Rendering
Navigation Scenarios

6 Validation

Objectives
Introduction
Validation
Standard Validators
ltfvalidateLengthgt
ltfvalidateDoubleRangegt
ltfvalidateLongRangegt
Checking for Required Values
Showing Validation Error Messages
Customizing Standard Error Messages
Standard Validation Error Messages
Validation Process
Sequence Diagram
Bypassing Validation
Immediate Command Components
Immediate Input Component
Accessing User Input
Immediate Example
Advanced Field Validation

Advanced Error Handling

7 Advanced GUI Components

Objectives
HTML Panel
Applying Styles
Grouping Components
Data Table
Using a Data Table
Data Table Model
Using a Data Table
Displaying a Header and Footer Row
Applying Styles
Adding Links to a Row
Using Component Binding
Handling Action
Using the Data Table Model
Handling Action

8 JSF Techniques

A Typical Application
The Create Form
Create Action Method
Listing Items
Editing an Item
Adding the Edit Link
The Edit Form
Update Item
Things to Keep in Mind

9 Unified Expression Language

Objectives
Unified Expression Language
Value Expressions
Method Expressions

Chained Resolution
Operators and
Arithmetic Operators
Relational Operators
Logical Operators
Test for Empty Collection
Conditional Operator
Order of Evaluation
Introduction to JSTL
Using JSTL with JSF
The ltcoutgt Tag
The ltcifgt Tag
The ltcchoosegt Tag
The ltcforEachgt Tag
ltcforEachgt or lthdataTablegt
International Text Display Tags

10 Custom Components

Custom Components
Requirements To Develop Custom Components
Packages Useful for Custom Component Developer
javaxfacescomponentUIComponent
Decoding
javaxfacescomponentUIComponent
UIComponentTag
Implementing Custom Component Tags
FacesContext
javaxfacesapplicationApplication

javaxfacescontextResponseWriter

javaxfacescomponentUIComponent
javaxfacescomponentEditableValueHolder
Tag Library TLD
Faces configuration file facesconfigxml
facesconfigxml
Samplejsp Example Showing the Relationship Between the JSF Artifacts

External Renderer
Render Defined in facesconfig File
Implementing the Renderer
Event Listeners
Using ActionListener in JSP
ActionListener in the Java Code
ActionListeners in JSF
Create Input Form
Input Form Code
Update facesconfigxml
ActionEvent Handling
Summary

11 Data Conversion Model

Conversion Overview
Different Viewpoints of Data
Process of Conversion
Why Local Values
Types of Standard Converters
Standard Converters with JSF
Three Ways to Use Standard Converters
Bind UI Component to Backing Bean Property
Use converter Attribute on the UI Component
Use ltfconvertergt Tag with ConverterId Attribute
Usage of Standard Converters
Output of Using Standard Converters
Converter Attribute
Standard Converters to Display Output
Standard Converters Screen Shot
Conversion Errors
Displaying Error Messages
Conversion Tag
Conversion Error Display
Conversion Error
Custom Converter
Custom Converter
Registering the Converter

Using the Registered Converter
Conversion Errors
Summary

12 Oracle ADF Components

Introduction
Getting and Installing ADF
The Tag Libraries
The Top Level Tags
Partial Page Rendering PPR
Partial Page Rendering
Auto Submit
Client Side Validation
The Select Many Shuttle
The Table
Table Row Selection
File Upload
Menu Tabs

13 Introduction to Facelets

Constructing and Rendering a View JSP way
Facelets
Getting Facelets
Using Facelets
Page Templates
Define a Page Template
Define a Template Client
Summary

14 Custom Validators

Overview
Introduction
Validation Review
Custom Validators
The Validator Interfaces

Creating a Custom Validator
Custom Validator Example
Creating a JSP Custom Tag
The ValidatorELTag Class
Custom Validator Example
Custom Validator Tag Example
Create the TLD File
Using the Custom Tag
Validation from Managed Bean
Add Validation Logic
Use the Managed Bean Validator
Summary