

Web Developer Series:

JavaServer Pages (November 2002)

Welcome to *JavaServer Pages*, a course focused on the JavaServer Pages (JSP) server-side development environment. JSP is a Java-based technology used to create dynamic, data-driven Web applications. In this course, you will learn the fundamentals of JSP, including using JSP to interact with JavaBeans, the creation of JSP custom tags and tag libraries, and the use of JSP with databases. This course will also teach you the basics of using JSP files to interact with Java servlets.

Topics

Introduction to JavaServer Pages

- Introduction to JavaServer Pages (JSP)
- What is Enterprise JavaBeans (EJB)?
- What are Java Servlets?
- What is JSP?
- Web Application Technologies
- Advantages of JSP
- The Mechanics of JSP
- Basic JSP Syntax

JSP Fundamentals

- Fundamentals of JSP
- Evaluating Java Expressions
- Using JSP Scriptlets
- Using JSP Declarations
- Using JSP Predefined Variables

JSP Directives

- Introduction to JSP Directives
- Including Files in JSP
- Using the `jsp:plugin` Element

JSP and JavaBeans

- Introduction to JSP and JavaBeans
- Component-Centric Architecture
- JavaBeans
- JavaBean Property Data Types
- JSP-JavaBean Tags
- The `<jsp:getProperty>` Tag
- The `<jsp:setProperty>` Tag
- Rules for Constructing JavaBeans
- The JavaBean Serializable Interface
- Accessing JavaBeans Through Scriptlets and Expressions

JSP Custom Tags and Tag Libraries

- Introduction to JSP Tag Libraries
- Why Use Tag Libraries?
- Using Custom Tags
- Creating JSP Custom Tag Libraries
- The `taglib` Directive
- Using Custom Tags in JSP Files
- Tag Handlers
- Tag Library Descriptor
- Deploying Tag Libraries

JSP and Java Servlets

- Interaction Between JSP and Java Servlets
- Servlets
- Servlets vs. JSP
- Web Application Architecture
- JSP vs. Servlet Architecture
- Controlling the flow with `RequestDispatcher`

JSP, HTML Forms and Databases

- Introduction to JSP, HTML Forms and Databases
- Distributed Multi-tiered Applications
- Steps in a Typical Web Communication
- HTML Forms
- Request Object
- Relational Databases
- Structured Query Language (SQL)
- Java Database Connectivity (JDBC)

Target Audience

Web Developers, Java Programmers, Solution Developers, and Enterprise Developers.

Job Responsibilities

Implement JavaServer Pages to create dynamic, data-driven Web applications using directives, custom tags and tag libraries, and databases.

Prerequisites

Students must have completed the *Java Programming Fundamentals* course or be able to demonstrate equivalent Java programming knowledge before taking this course.

Duration

18 hours