



Servlets and JavaServer Pages
A Part of the *Java: Under the Hood Series*

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Version 2.1

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Course Description

This course covers the Java technologies Servlets and JavaServer Pages (JSP). Students will learn the details of developing and deploying servlets and JSP pages and how to design Java Web applications using the Model-View-Controller (MVC) design. Students will learn how to deploy and administer Java Web applications on Apache Tomcat using the mySQL database.

Course Length:

4 days

Audience:

Beginning Java programmers who need to learn how to develop Web applications using the various Java technologies like Servlets and JavaServer Pages. Students should be familiar with the Java language, SQL, and Web technologies like HTML.

Objectives:

- Understand the various components in a Java Web application.
 - Learn how Servlets and JavaServer Pages fit into the J2EE environment.
 - Understand the Model-View-Controller design of a Java Web application.
 - Learn how to install and setup the Tomcat Web server and mySQL database server.
 - Understand the lifecycle of a Java servlet and JavaServer Page.
 - Learn how to write and a deploy a Java servlet and JavaServer Page.
 - Understand the directory structure of Java Web applications.
 - Understand the various scopes an object can have in a servlet container.
 - Learn how to include and forward a request to another Web component.
 - Learn how to create client session in JSP and servlets.
 - Learn how to write effective and useful servlets and JSP pages.
 - Understand the various elements of a JavaServer Page.
 - Learn how to create a custom JSP tag library.
 - Learn how to use the JSP Standard Tag Library.
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Weekly Schedule

The following is a tentative schedule for the pacing of the course. The actual flow of the course may vary.

Day One

- Chapter 1: An Overview of Java Web Development
- Chapter 2: An Introduction to Servlets
- Chapter 3: Writing Servlets

Day Two

- Chapter 4: The Model: JavaBeans and JDBC
- Chapter 5: Using Servlets Effectively

Day Three

- Chapter 6: An Introduction to JavaServer Pages
- Chapter 7: Using JavaBeans within JSP

Day Four

- Chapter 8: Custom JSP Tags
- Chapter 9: JSP Standard Template Library (JSTL)

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