BUILDING WEB APPLICATIONS WITH SERVLETS AND

JAVASERVER PAGES

TUTORIAL PRESENTATION

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ABSTRACT
Servlets and JavaServer Pages provide the ability to dynamically generate web pages using the Java programming language. Among other benefits, the use of Java on the server-side allows the web developer to directly implement object-oriented designs, utilize multiple threads of execution, and employ JDBC to communicate with a database. This tutorial will introduce Servlets and JavaServer Pages through UML diagrams, code samples, and an example web application.

TUTORIAL:

Web Development Overview: The spectrum of technologies for static, dynamic, and active web pages will be reviewed.

Introduction to Java Servlets and JavaServer Pages: An overview of the Java Servlet and JavaServer Pages technologies will be presented. Motivation for using this technology over other options will be discussed.
Setting up the environment: References will be provided for installing and configuring the Jakarta Tomcat Servlet container for the Apache web server. Examples will also be given using Sun’s Forte for Java. A low-cost out-sourcing alternative will also be suggested.

A Sample Web Application: The design and output of a sample web application developed using Servlets and JavaServer Pages will be presented.

Web Application Patterns: Some documented patterns for designing web applications will be presented, particularly as they apply to the integration of Servlets and JavaServer Pages.

Use in curriculum: Examples of how the author has integrated Servlets into existing computer science courses will be discussed.