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.

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specific permission.

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

<u>Introduction to Java Servlets and JavaServer Pages</u>: An overview of the Java Servlet and JavaServer Pages technologies will be presented. Motivation for using this technology over other options will be discussed.

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<u>Setting up the environment</u>: 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.

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

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

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