



Web Database Programming with Java

LEARN JAVA WEB DATABASE PROGRAMMING IN JUST 3 DAYS

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INTERNET

Course No. F1018

3 Days

Target Audience:

This course is designed for programmers who wish to implement high performance web database applications on Java application servers. The course is workshop based and a complete application will be implemented during the three days.

Pre-requisites:

Before attending this course, students should have the following pre-requisites:

- Good programming experience.
- Basic understanding of object-oriented programming.
- Familiarity with the Java programming language.
- Basic experience of HTML and web page design.

Purpose:

The course covers all aspects of web database implementation with Java including the relevant programming knowledge; networking issues and application server configuration; database design and SQL; installation and programming the database middleware; the separation of code from page design through use of custom Tag Libraries and best practice software design. Java Servlets, Java Server Pages, standard and custom Tag libraries, Java Beans and JavaServer Faces are covered in detail. The delegate will create a complete application during the course and will be in a position to design and implement web database systems alone or with a team of web designers on completion of the course.

At the end of the course the delegate will be able to complete the following:

Installation and Network

- TCP/IP Networking and DHCP
- Firewalls and the DMZ
- J2SE Installation
- Tomcat Installation
- Web Server Integration

HTML Revision

- HTML Forms
- ContentType
- POST and GET
- URL Rewriting and Extra Path
- Headers and Redirect
- Caching and Refresh
- JavaScript

Java Servlets

- Response and Request objects
- Forwarding a Request
- Sessions and cookies
- ServletContext Attributes
- Initialisation Parameters
- Best Practice Software Design
- Java Beans

JSP - Java Server Pages

- <%@ directives %>
- <%! declarations %>
- <%= expressions; %>
- Implicit objects
- <% scriptlets %>
- <jsp: actions %>
- <jsp: usebean %>

Tomcat Configuration

- Directory Structure
- war files
- Configuring web applications
- User Authentication
- Tomcat Configuration
- Welcome Page
- Error Pages
- Management and Administration System
- Filters

Database Design and SQL

- Installation of MySQL
- Introduction to Database Design
- Creating tables
- SELECT, UPDATE and DELETE
- Sophisticated Queries
- Aggregated Queries
- Correlated Queries
- Performance Issues

JDBC

- JDBC Installation
- ResultSets
- MetaData
- Prepared Statements
- Stored Procedures
- Scalar Functions
- DataSource and Connection Pooling
- RowSets and Persistence
- JNDI Setup in Tomcat

Advanced Features

- Error handling
- Security
- Filters
- Threading
- JavaMail
- Internationalisation
- Listeners

JSTL - Java Standard Tag Libraries

- Core Tags
- XML Tags
- Internationalisation Tags
- Database Tags
- Expression Language

Custom Tag Libraries

- Tags
- Body Tags
- Iterated Tags
- Attributes
- Nested Tags
- Tomcat Configuration

JavaServer Faces

- Forms
- Tag Library
- Database Beans
- Validation
- Navigation
- Configuration

Technology Overview

- Ant
- J2EE Application Servers
- Log4j logging
- Enterprise Java Beans
- Apache Struts
- Expresso Framework
- Persistence





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PARTICULARS

Cost:

£1050 plus VAT

Platforms:

Windows XP

Numbers:

Maximum of 6 people on each
course at F1's training facilities
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