

# Java XML Programming

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**Length:**

3 days

**Description:**

XML has been the biggest buzzword on the Internet community for the past year. Java revolutionized the programming world by providing a platform-independent programming language. XML takes the revolution a step further by providing a platform-independent language for interchanging data. Java and XML share many features that are ideal for building Web-based enterprise applications, such as platform-independence, extensibility, reusability, global language (Unicode) support, and both are based on industry standards. Together Java and XML allow enterprises to simplify and lower cost of information sharing and data exchange. This course shows you how to put the two together, building real-world applications in which both the code and the data are truly portable.

**Objectives:**

- The basics of XML
- Using standard Java APIs to parse XML
- Designing new document types using DTDs and Schemas
- Writing programs that generate XML data
- Transforming XML into different forms using XSL transformations (XSL/T)
- XML-RPC
- XML as a configuration language

**Audience:**

Programmers who want to learn enterprise application integration.

**Prerequisites:**

Java programming experience.

**Course Contents:****Chapter 1 - Introduction**

What Is It?  
How Do I Use It?  
Why Should I Use It?  
What's Next?

**Chapter 2 - Creating XML**

An XML Document  
The Header  
The Content  
What's Next?

**Chapter 3 - Parsing XML**

Getting Prepared  
SAX Readers  
Content Handlers  
Error Handlers  
A Better Way to Load a Parser

**Chapter 4 - Constraining XML**

Why Constrain XML Data?  
Document Type Definitions

XML Schema

**Chapter 5 - Validating XML**

Configuring the Parser  
Output of XML Validation  
The DTDHandler Interface

**Chapter 6 - Transforming XML**

The Purpose  
The Components  
The Syntax

**Chapter 7 - Traversing XML**

Getting the Output  
Getting the Input  
The Document Object Model (DOM)

**Chapter 8 - JDOM**

Parsers and the Java API for XML Parsing  
JDOM: Another API?  
Getting a Document  
Using a Document  
Outputting a Document

**Chapter 9 - Web Publishing Frameworks**

Selecting a Framework  
Installation  
Using a Publishing Framework  
XSP  
Cocoon 2.0 and Beyond

**Chapter 10 - XML-RPC**

RPC Versus RMI  
Saying Hello  
Putting the Load on the Server

**Chapter 11 - XML for Configurations**

EJB Deployment Descriptors  
Creating an XML Configuration File  
Reading an XML Configuration File

**Chapter 12 - Creating XML with Java**

Loading the Data  
Modifying the Data  
XML from Scratch

**Chapter 13 - Business-to-Business**

The Foobar Public Library  
mytechbooks.com  
Push Versus Pull

**Chapter 14 - XML Schema**

To DTD or Not To DTD  
Java Parallels  
What's Next?