

XML Development in Java™



Instructors: **Neal Ford** is also the designer and developer of applications, instructional materials, magazine articles, video presentations, and author of the books *Developing with Delphi: Object-Oriented Techniques* and *JBuilder 3 Unleashed* (as the lead author) and the upcoming *Art of Java Web Development*. His language proficiencies include Java, C#/.NET, Object Pascal, C++, and C. He is also an internationally acclaimed speaker, having spoken at numerous developers' conferences worldwide.

Total Learning Time: 4-12 hours

Media run time is 4+ hours, total learning time could be up to 12 hours if the courseware, labs and exams are utilized. This course can also be used as quick reference material, with the ability to access just the information you need in a matter of minutes.

Course Description: This course provides the foundations for working with XML in Java. XML is an important data format, and although tools try to hide the underlying syntax, eventually you must parse and manipulate it. This course shows how to parse, generate, manipulate, and transform XML using Java. It covers the major World Wide Web Consortium (W3C) interfaces and their implementations in Java, including SAX and DOM. It covers multiple releases of these important APIs. Using SAX and DOM, the course covers event driven and in-memory parsing of XML documents. It also shows how to build DOM trees in memory and persist them as valid XML documents. It also shows the DOM to alternative JDOM and how that approach differs from the standard.

Course Outline:

Introduction to XML Concepts

- XML Basics
- DTD and XSD
- DOM
- XSL and XSLT
- XPath

SAX

- The SAX Interfaces
- SAX Readers
- Simple Parsing with SAX
- Content Handlers
- Error Handlers

Advanced SAX

- Handling Validations
- Filters
- Writers
- Advanced Handlers

DOM

- Document Object Model
- Traversing DOM Trees
- Serialization
- Making Changes

Advanced DOM

- Namespaces
- DOM Level 2 Modules
- DOM Level 3

JDOM

- Using JDOM
- Special JDOM Features
- Wrappers

JAXP

- Using Factories
- JAXP Interfaces
- JAXP 1.0 Features
- JAXP 1.1 Features

Transformations

- Driving Transformations with Xalan
- Web Publishing Frameworks
- XSP

XML-RPC

- Introduction to Distributed Computing
- XML-RPC
- Using XML-RPC
- XML-RPC Characteristics

SOAP and Web Services

- Introduction to SOAP
- Introduction to Web Services
- Axis
- WSDL
- XML in SOAP

Number of Modules	Media Run Time	Total Learning Time	Online Courseware*	Hands-on Labs	Sample Code	Pre/Post Exams	Supports Microsoft Exam Number
3 Modules	4+ hours	4-12 hours	250+ Pages	Yes	Yes	Yes	N/A

* Professionally printed, bound courseware (student manuals) are available. Ask for details.