

XML PARSING USING C# AND .NET

Course Description

This two-day course teaches the different types of XML parsing available in .NET. The course starts off with an overview of the .NET Framework and XML classes found in the System namespace. It then dives into the different parsing methodologies available from Microsoft and gives an overview of XML technologies in the .NET Framework. Upon completion, students will be fluent in the .NET System.Xml DOM classes and the various ways to retrieve, modify, and delete XML data. The course includes extensive programming examples, including a progressively developed case study that illustrates the use of XML in an eCommerce application.

Course Length: 2 Days

Course Tuition: \$500 (US)

Prerequisites

Ability to read and to write well-formed XML. Ability to read a DTD not strictly required, but preferred. A working knowledge of programming the .NET Framework using C#.

Course Outline

- .NET Framework XML Overview
- XML in the .NET Framework
- .NET XML Namespaces and Classes
- How Does the MSXML Fit in .NET
- What Does the W3C Say
- What Does the W3C Not Say
- .NET XmlReader and XmlWriter
- .NET DOM Parser
- XML Serialization
- XML and ADO.NET
- Xpath and XSLT
- XML and the Web
- Reading XML Streams in .NET
- XML Document Streams
- The XmlTextReader Class
- The Document Object Model in .NET
- Origins of the DOM
- DOM Levels
- DOM2 Structure
- The XmlDocument Class
- DOM Tree Model
- DOM Interfaces
- XmlDocument, XmlNode and XmlNodeList Classes
- XmlElement and XmlText Classes
- Finding Elements By Name
- Walking the Child List
- The XmlAttribute Class
- Namespaces and the DOM
- Error Handling

Accessing Node Properties with the .NET XML Classes
Accessing Attribute Values
Traversing the XML Document
Catching XmlExceptions
The XmlNodeReader Class
• Validating XML Streams
Specifying Valid Documents with DTD
Validating XML with XmlValidatingReader
Specifying Valid Documents with XML Schema
• Writing XML Streams in .NET
The XmlWriter Class
The XmlTextWriter WriteXXX Methods
XmlTextWriter States
Writing Elements
Writing Attributes
Writing Namespaces

• Manipulating XML Information with the DOM
Modifying Documents
Modifying Elements
Modifying Attributes
Managing Children
Cloning
Splitting Text and Normalizing
Creating New Documents
• Appendix A. Zenith Courseware Case Study
• Appendix B. Quick Reference - XML and DTD Grammar
• Appendix C. Learning Resources