

XML.NET For Developers



XML.NET For Developers

4 Sessions –

12 Hours of Interactive Training

Microsoft's .NET Web services platform introduced a new suite of standards-based XML application programming interfaces. In the XML.NET For Developers course from LearnKey, expert instructor Martin Schaeferle shows programmers how to take advantage of these enhancement and improvements in XML for the .NET platform. At the conclusion of this course you'll be familiar with the .NET framework XML classes.

Prerequisites: Previous programming experience recommended. Knowledge of XML and .NET helpful.

About The Author

Martin Schaeferle is the Director of IT for AppDev, and has taught IT professionals nationwide to develop applications using Visual Basic, Microsoft SQL Server, Visual InterDev, and XML. Martin is a featured speaker at Microsoft TechEd and the Microsoft NCD Channel Summit, and is a featured LearnKey instructor for Web and distributed application training courses for developers. He specializes in developing Visual Basic database applications, COM-based components, and ASP-based Web sites.

Session 1

Section A: XML with Visual Studio

- Introduction
- Editing Tools
- XML Editor
- Views & Levels
- Creating XML Data
- Built-In IntelliSense
- Add Elements/Attributes
- Error Messages

Section B: Create & Transform Schemas

- XML Schema
- Generating Schema
- Automated Generation
- Change Namespace
- Create Schema
- Add Types/Element
- View/Use Schema
- XML Documentation

Section C: NET Framework

- XML within Framework
- Microsoft & XML
- Working with Framework
- Framework Tools

Section D: .NET Display Options

- Displaying XML
- Transforming XML Data
- Transform Option
- View Raw XML Data
- Web Server Controls
- Server Control Properties
- XML Data Islands
- Use Javascript

Section E: Working with XML Data

- Parsing XML
- .NET Parse Methods
- XmlReader
- XmlTextReader
- XmlTextWriter
- XmlTextWriter Methods
- Transformation with .NET
- Transform Method

Section F: Reading XML Streams

- XmlReader Class
- Derived Classes
- Loading & Parsing
- Load Methods
- Authentication
- Passing Credential

Section G: XmlTextReader

- Read Process
- White Space
- Properties/Methods
- Working with Nodes
- Restricting Effect
- Stack Class
- Navigate Stack

Session 2

Section A: XmlWriter

- Write Methods
- Formatting Properties
- Namespaces/Attributes
- Writing Binary Data
- Base 64 Method
- Reading Binary Data
- Using XmlReader

Section B: Document Object Model

- W3C DOM
- DOM Hierarchy
- View DOM Tree
- Loading DOM Methods
- Search Methods
- Node Collection
- Selective Node Collection
- DOM & White Space

Section C: XML Document Object

- Navigate DOM Tree
- Recurse Tree Procedure
- Navigation Methods
- WalkTree
- QueryTree/DeadReckon
- Factory Methods
- Add Nodes
- Add/Use Images

Section D: Modifying XML Using DOM

- Changing XML Data
- Locate Attributes
- Replace Attribute
- Change XML Structure
- Delete Elements
- Update Description
- Add Elements
- Add by Order

Section E: Validating with .NET

- Validation Technologies
- XmlValidatingReader
- Call ReadMethod
- Validation Properties
- Setup Reader
- Error Handling
- Caching Schemas
- Using Multiple Schemas

Section F: Creating XML Schemas

- XSD Generator
- Creation Options
- Schema Object Model
- SOM Elements/Attributes
- SOM Compile Method
- Use XSD Generator
- Use SOM
- Validate

Session 3

Section A: Transformation Basics

- XSLT Processing
- Transform Processes
- Create Stylesheet
- Create ASP.NET Page
- XSLT Output Options
- String/TextWriter
- Memory/FileStream
- Response/XmlReader

Section B: XPath in .NET

- XPath Specifications
- XPathNavigator
- XPathNode Iterator
- XPath Matches Method
- XPathExpression Object

Section C: Advanced XSLT Techniques

- Modifying Stylesheets
- Dynamic Modifications
- Modify Sort Order
- Passing Parameters
- Use Parameters

Section D: XSL Extensions

- Embedded Scripts
- Extension Objects
- Create Ext. Objects
- Scripts vs. Ext. Objects

Section E: ADO.NET & XML

- XML & Databases
- ADO.NET vs. ADO
- Connect with ADO.NET
- Access SQL Data
- Data Retrieval
- Using DataSets
- Retrieve Result Set

Section F: Modify Data with XML

- Writing XML
- WriteMode Options
- Stream/Test/XmlWriter
- DiffGram/WriteSchema

Section G: Loading DataSets with XML

- ReadXml Method
- ReadXmlSchema
- Using XmlReadMode
- ReadMode Options

Section H: Inferring Schemas with XML

- InferSchema
- Import XML Schema
- InferXmlSchema Method
- Apply Inferring Rules

XML.NET For Developers *continued*

Session 4

Section A: Synchronizing

DataSets

- XmlDataDocument Class
- XmlDataDocument Setup
- Synchronize Data
- Synchronize XML Data
- Display Data
- DataSet Views
- Manipulate DataSet
- Converting Methods

Section B: SQL with XML.NET

- Built-in Support
- Configure SQLXML
- Setup Virtual Directory
- T-SQL Extensions
- For XML Clauses
- Use for XML Options
- Format SQL Data
- T-SQL using HTTP

Section C: Write XML Data to

SQL Server

- Template Queries
- Use Templates
- OPENXML
- DOM Objects with SQL
- XML Updategrams
- Sql:Sync Elements
- Use Updategrams

Section D: SQLXML Managed

Classes

- Functionality
- Namespace
- Server-Side XML
- SqlXmlCommand Class
- Client-Side XML
- Load DataSet
- Use Template Queries

Section E: Creating Web Services

- Web Services Basics
- Setup
- Test Web Service
- Automatic WSDL
- Using Attributes
- Building Clients
- Proxy Class

Section F: SQL Server Web

Services

- Configure Server
- Consume Web Services
- Behavior
- Using Behaviors
- Behavior Methods
- Callback Function
- onresult Event