

XML Seminars

The following is a list of XML processing seminars that can be presented at your user group or other live event by **Paul D. Sheriff**.

Essentials of XML Processing

XML files are very common in today's programming world. You will most likely need to read files, write files and query XML within your applications. .NET provides a rich set of XML processing classes that you can use to perform all these functions. VS.NET allows you to easily create XML files. In this seminar you will learn how to read and write XML files using the various .NET classes, and how to build XML files using VS.NET. LINQ to XML will also be demonstrated. You will also see how to use XML files to help you prototype applications.

Learning Objectives

How to read XML files

How to write XML files

Basics of XPath Queries

Using XML files for prototyping

Using LINQ to XML

LINQ to XML Makes Working with XML a Breeze

LINQ technology in .NET has some great hooks into XML that make using XML documents very easy. This seminar will explore how you will put this technology

to work in your applications. Many XPath queries can be greatly simplified using the LINQ syntax. Besides the obvious advantages of using LINQ to iterate over XML data you can also use it to create and process XML documents. One great way you can use XML is in prototyping. This session will show you how to use LINQ to XML to read and write XML files. You will walk away with a template for creating data access classes for your XML files.

Learning Objectives

Load XML files

Use LINQ with XML

Create data access classes for XML

Store and Restore .NET Objects as XML

Moving properties one-by-one into an XML file, only to move them back into properties is a time-consuming process and takes many lines of code. Using the `DataContractSerializer` and other .NET classes, you may serialize an object to an XML file, then later restore it with just a few lines of code. Using attributes you may also specify which properties are serialized.

Learning Objectives

Serialize a .NET object to XML using the `DataContractSerializer`

Using attributes to control serialization

Using the `BinaryFormatter` to serialize a .NET object to XML

Deserialize a .NET object from XML

Create some extension methods to simplify the serialization process

A Design Pattern for Caching Frequently Used Data in XML

Instead of retrieving data that does not change much from a database, you can cache that data into an XML file. Reading from the file system is generally faster

than reading from a database. This module presents a design pattern for reading data one time from a database and storing in an XML file. The student also learns how to see if the data is changed on the server and needs to be re-cached into the XML file.

Learning Objectives

Download data from database and store in XML file

Create class to read from local XML or database

Add method to check if data is changed on the server

Use XML Files! An Alternative to SQL

XML files are very common in today's programming world. You will most likely need to read files, write files and query XML within your applications. .NET provides a rich set of XML processing classes that you can use to perform all these functions. One great use of XML files is to cache validation table data on the client instead of constantly gathering this rather static table data from the server. This technique comes in very handy in WPF, Silverlight and Windows Phone applications. You can even use XML files to completely replace SQL in some applications. In this seminar you will learn how to perform complete read, add, edit and delete operations using LINQ to XML. You will also see a technique of how to keep your XML files up-to-date with any server changes. You will walk away confident that you can put these techniques into use in your applications immediately!

Learning Objectives

Read from XML files using LINQ to XML

Add/Edit/Delete records in XML

Read XML from server when server data changes