LINQ to XML Makes Processing XML Documents Quick and Easy

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Module Goals

Use LINQ to XML

Query XML files

- Where, Order By, Join
- Read config files
- Create collection of objects

Aggregate XML data

- Sum, average, minimum, maximum

System.Xml.Linq Namespace

Classes for working with XML

XDocument class

Complete XML document

XElement class

Single or multiple elements

LINQ to XML

XPath queries

LINQ to XML

Special LINQ syntax for XML

Easier to read than XPath

Simpler than XPath

Loading a Document

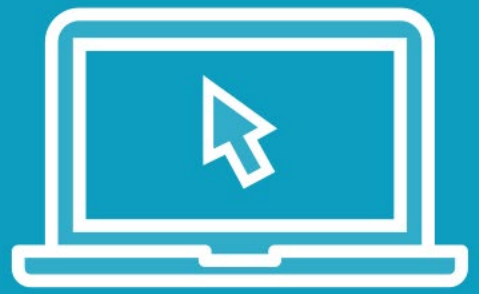
XDocument.Load("Cust.xml")

- Loads all nodes including root
- Query using Descendants() method

XElement.Load("Cust.xml")

- Loads nodes below root
- Query using Elements() method

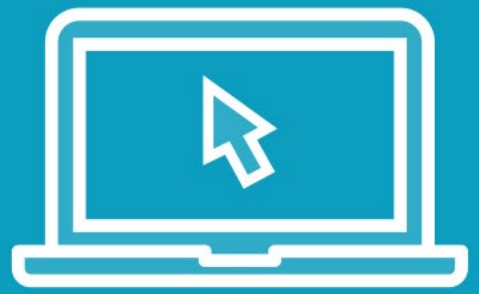
Demo



Read XML

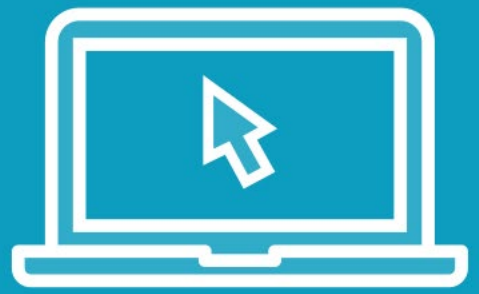
- Using XDocument
- Using XElement

Demo



Query all nodes

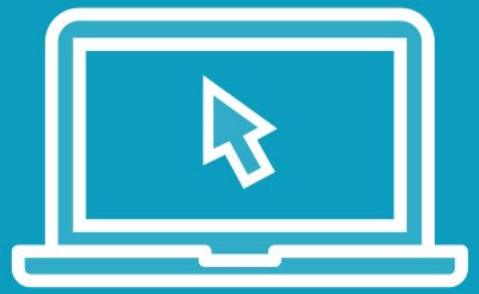
Demo



Where clause

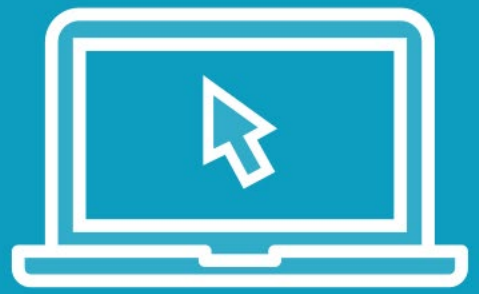
- Retrieve a single node
- Retrieve a subset of nodes
- Query by attribute

Demo



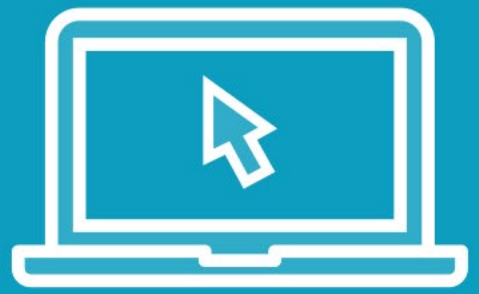
Sort data using OrderBy clause

Demo



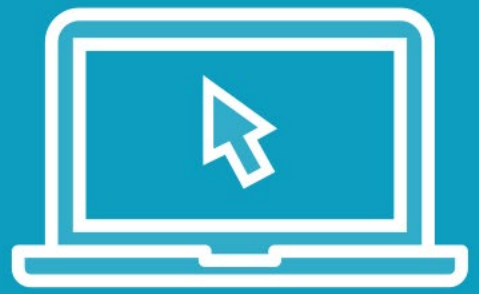
Joining two documents

Demo



Read Config File

Demo

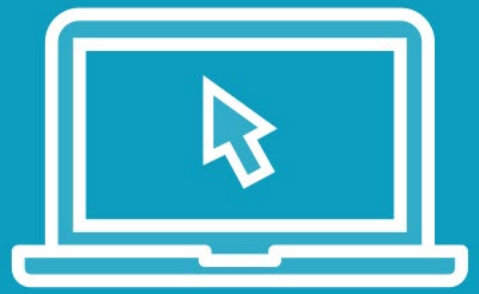


Load collection of objects

XML extension methods

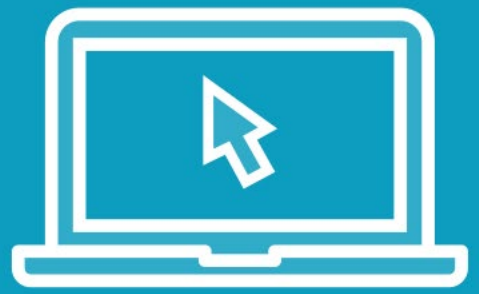
Aggregate Data

Demo



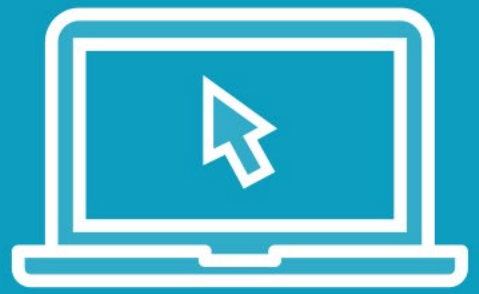
Count and sum nodes

Demo



Minimum and maximum node values

Demo



Average of node values

Summary

LINQ to XML is easy to use

- Same syntax you are used to

Process XML similar to SQL

- Where, OrderBy, etc.

Aggregation avoids writing loops

Coming up in the next module...

Use XDocument/XElement classes

Using XPath queries