



## Aspect Training

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YOUR COURSE, YOUR WAY - MORE EFFECTIVE IT TRAINING

# LINQ For .Net Developers

**Duration: 2 days**

### Overview:

LINQ is the part of the .NET Framework that provides a generic approach to querying data from different data sources. It has quickly become the next must-have skill for .NET developers.

Aspect Training's LINQ for .NET Developers has the detail you need to grasp Microsoft's new querying technology, and concise explanations to help you learn it quickly.

### Prerequisites:

Experience with developing applications using a .NET language

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### Topics:

#### 1 - Language Extensions

Implicitly typed variables

Extension methods

Object initialization syntax

Anonymous types

Lambda expressions

#### 2 - Introduction to LINQ

LINQ expressions

Using via extension methods

Filtering

Sorting

Aggregation

Skip and Take operators

Joins

#### 3 - Deferred Execution

Benefits and drawbacks

IEnumerable vs IQueryable

Using across tiers

#### **4 - Data Projection**

Single result value

Existing types

Anonymous types

Grouping

#### **5 - LINQ to XML**

New XML classes

Generating XML

Querying XML

Using data projection

Combining with XPath

#### **6 - LINQ to SQL**

Attributes and mapping

Creating a DataContext

Deferred loading

Saving changes

Inserts and deletes

Transactions

Concurrency

Handling exceptions

#### **7 - LINQ to Entities**

ADO.NET Entity Framework

Differences from LINQ to SQL

Available providers

Defining an Entity Data Model (EDM)

Database-first vs. Model-first

Object Services

Change tracking

Using EntityClient

Using stored procedures

N-tier and service-based applications

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