



# ADO.NET Using Visual Basic 2005

with Ken Getz and Andy Baron

In this course, learn about the features provided by ADO.NET 2.0. Learn to connect to data sources, retrieve and manipulate data, and perform data updates. Examine the various ADO.NET classes, including Connection, Command, DataReader, DataSet, DataTable, DataRelation, and more. See how to apply constraints and relationships to disconnected data. Learn how to update data, including how to handle stored procedures, parameters, and return values. Understand how to search, sort, and filter data stored in a DataSet or DataTable. Become familiar with strongly typed DataSets and learn their advantages. See how to leverage the power of XML through serialization, Diffgrams, and the XMLDataDocument object. Examine new ADO.NET features that support SQL Server 2005 technologies, including asynchronous commands, Multiple Active Result Sets, bulk inserts, and more.

### Accessing Data with ADO.NET

- The ADO.NET Object Model
- Connecting to Data
- Understanding Connection Pooling
- Using Provider Statistics

### Retrieving Data

- Introducing Command Classes
- Working with Data Readers
- Digging Deeper into Commands and DataReaders

### Caching Data in DataSets

- Populating a DataTable
- Filling DataSets Using a DataAdapter
- Using the Load Method
- Retrieving Schema Information
- DataSets and XML

### Applying Constraints

- Using Constraints
- Foreign Key Constraints
- Other Constraints

### Data Relations

- Creating DataRelations
- Navigation Pathways
- Expressions and Relations
- Specifying XML Nesting

### Updating Data

- Creating Commands with CommandBuilders
- Creating Custom Commands
- Using Stored Procedures
- Performing Batch Updates

### Using Strongly Typed DataSet Classes

- Using a Loosely Typed DataSet
- Creating a Strongly Typed DataSet
- Using a Strongly Typed DataSet
- Issues with Using a Strongly Typed DataSet

### Handling Exceptions and Data Errors

- Using Structured Exception Handling
- Handling Provider Errors
- Using Transactions
- Handling Concurrency Conflicts

### Searching, Sorting, and Filtering

- The Sample Project
- Working with DataTables
- Working with DataViews

### Handling AutoIncrement Columns

- The AutoIncrement Property
- Retrieving New Database Values
- Avoiding Multi-User Conflicts
- Merging Inserted Rows
- Other Considerations

### XML Techniques

- ADO.NET and XML
- Saving DataSet Data as XML
- Loading XML Data into a DataSet
- Working with DataSets and XML Together
- Working with XML Data in SQL Server

### Features Supporting SQL Server 2005

- Enumerating Servers on a Network
- Asynchronous Processing
- Multiple Active Result Sets (MARS)
- Bulk Copy Operations
- SQL Server Max Data Types
- SQL Server User Defined Types
- SQL Server Snapshot Isolation

**This course includes 45+ hours of total training time...**

- 15+ hours of media run time
- 600+ pages of printable courseware
- Step-by-step hands-on lab exercises
- Pre/post exams
- Sample code

#### YOUR CHOICE OF FORMATS:

CD-ROM	10 CDs
DVD-ROM	1 DVD

