



Advanced Visual Basic.Net

Overview: In this course, you'll investigate some of the important classes and tools provided by the .NET Framework. This course focuses on important development techniques, such as delegates and events, asynchronous programming and multi-threading, Windows Management Instrumentation (WMI) support in the System Management namespace, serialization, attributes and reflection, printing, working with XML documents, and creating custom controls.

Audience: Programmers who will be developing in VB.NET.

Prerequisites: Fundamentals of Visual Basic .NET.

Lesson 1: Delegates and Events

- Motivating Delegates
- Introducing Delegates
- Working with Events

Lesson 2: Asynchronous Programming in VB.NET

- Processes and Threads
- Using Delegates
- Using the Thread Pool Directly

Lesson 3: Timers and Threads

- Using .NET Timers
- Creating Your Own Threads

Lesson 4: Filling the .NET Gaps with WMI

- Introducing WMI
- Getting Started with WMI
- WMI Queries, Properties, and Methods
- WMI Server Explorer Extensions

Lesson 5: WMI Events and Asynchronous Handling

- Creating WMI Event Handlers
- Working with WMI Asynchronously
- WMI Server Explorer Extensions and Events

Lesson 6: Serialization

- Introducing Serialization
- Serializing Complex Objects
- Customizing the Serialization Process

Lesson 7: Attributes and Reflection

- Introducing Attributes
- Creating and Using Custom Attributes
- Introducing Reflection
- Using Reflection to Perform Late Binding

Lesson 8: Printers and Printing

- The PrintDocument Class
- The PageSettings Class
- The PrinterSettings Class
- Working with Print-Related Controls
- A More Complex Report

Lesson 9: Reading and Writing XML

- Getting Started
- Reading XML Data
- Working with Nodes
- Creating and Modifying XML
- Dealing with Errors

Lesson 10: Creating Custom Windows Controls

- Control Creation in Windows Forms
- Inheriting from an Existing Control
- Drawing Your Own Custom Controls
- Creating Composite Controls