Course Outline | Microsoft Visual Basic Object Oriented Development

3 day(s)

Overview

Embark upon object-oriented programming in the .NET era with VB.NET Object Oriented Development. We will take you from the basics through advanced OOP concepts with the help of clear instructions, candid reference notes and design tips, and engaging programming examples.

Learn how to take full advantage of the objects provided by Visual Basic .NET or how to create and implement your own objects. In less time than you thought possible, you will absorb object-oriented design concepts and terminology and understand how to construct elegant object-oriented programs with VB.NET.

Prerequisites

Previous knowledge and experience of developing applications with VB.NET.

Course Outline

Writing Your First Object-Oriented

- Your First Object-Oriented program
- Using the Class View

Creating Class Instances with Constructors

- Constructors
- Reference and Value Types
- Understanding Array Declarations
- Creating Fields and Properties
- Design Considerations for Properties
- Using Indexers and Default Properties

Working with Methods Using Inheritance to Create Specialized Classes

- Inheritance: An Overview
- A Simple Example
- Inherit from a Contro

Designing Base Classes as Abstract Classes

- Abstract Classes
- A Typed Collection

Responding to Changes with Events and Exceptions

- An Event-Driven Application
- Setting Up Event Methods Without Using the Designer
- Exceptions

Putting It All Together with Components

- Class Library
- Namespaces

Providing Services Using Interfaces

- What is an Interface
- .NET Framework Interfaces
- Uses of Interfaces

Using Classes Interchangeably Through Polymorphism

- The Base Classes
- The Derived Classes
- The User Interface

Using Shared and Static Members

- Shared and Static Members
- Design Considerations

Saving Instance Data

- Serialization
- DataSets