

Getting Started with Microsoft Visual Studio 2005 for Microsoft Visual Basic 6.0 Developers

Course 2562: Two days; Instructor-Led

Introduction

Elements of this syllabus are subject to change.

This two-day instructor-led course provides students with the knowledge and skills to develop simple Microsoft Visual Basic .NET Framework applications. The course shows students how easy it is to develop applications by using Microsoft Visual Studio 2005 and .NET Framework version 2.0. The course focuses on the comparison between performing a task in Visual Basic 6.0 and Visual Basic .NET, including code samples, integrated development environment IDE issues, deployment options, and language structures.

Students who complete this training should feel confident when developing their first simple .NET Framework application.

Audience

This course is intended for:

Application Developers

- Developers with 3 years of experience in using Visual Basic 6.0. These developers might also have experience with earlier versions of Visual Basic.
- Full-time developers.
- Corporate or ISV developers who have been using Visual Basic 6.0 to develop business applications.

The target audience does NOT include the following:

- Game developers
- Device driver developers
- Hobbyist developers
- Embedded Application developers (ATMs, kiosks, Microsoft Windows(CE devices, phones)

Typical projects that a member of the target audience is likely to work on include the following areas:

- Data oriented - data entry, data analysis, reporting
- Workflow/Communication
- B2B
- B2C
- Inventory and resource planning
- Financial/Accounting applications

At Course Completion

After completing this course, students will be able to:

- Build a solution by using the Visual Studio 2005 IDE.
- Explain the key features and components of Microsoft .NET Framework 2.0.
- Write basic code in Visual Basic 2005.
- Build classes and work with objects in Visual Basic 2005.

- Deploy .NET Framework applications.

Prerequisites

Students must have at least 2-3 years' development experience with Visual Basic 6.0.

Microsoft Certified Professional Exams

No Microsoft Certified Professional exams are associated with this course currently.

Course Materials

The student kit includes a comprehensive workbook and other necessary materials for this class.

Course Outline

Module 1: Building Solutions Using the Visual Studio 2005 IDE

This module introduces students to the Visual Studio 2005 IDE. The module covers the benefits of building applications by using Visual Studio 2005, the procedures used to create a new project in Visual Studio 2005, and the functionality of various Visual Studio IDE features. In addition, the module also teaches how to build and debug a solution by using Visual Studio 2005. After completing this module, students will be able to build a solution by using the Visual Studio 2005 IDE.

Lessons

- Overview of Application Development in Visual Studio 2005
- Creating a New Project
- Using the Visual Studio 2005 IDE Features
- Building and Debugging a Solution

Lab: Building Solutions Using the Visual Studio 2005 IDE

- Create a Visual Basic 2005 Windows-based Application Project

After completing this module, students will be able to:

- Explain the different types of applications that can be developed by using Visual Studio 2005 and the benefits of using Visual Studio 2005 to develop these applications.
- Create a new project in Visual Studio 2005.
- Explain the functionality of various Visual Studio 2005 IDE features.
- Build and debug a solution.

Module 2: Introduction to Microsoft .NET Framework 2.0 Architecture

This module introduces students to the .NET Framework runtime environment. The module also teaches about the .NET Framework Class Library, an extensive set of classes that will help students build applications quickly and reliably. Students will also learn how the namespaces organize the related .NET Framework classes into functional categories.

Lessons

- Introduction to the .NET Framework Runtime Environment
- Using the .NET Framework Classes and Namespaces

After completing this unit, students will be able to:

- Explain how the .NET Framework common language runtime (CLR) improves upon the Visual Basic 6.0 runtime.
- Use the .NET Framework classes and namespaces in projects.

Module 3: Writing Basic Code in Visual Basic 2005

This module teaches students how to declare and initialize variables, arrays, classes, and structures. The module also teaches how to control the flow of execution by using decision and loop structures, and how to store data using arrays and collections. Students will also learn to handle errors in Visual Basic 2005.

Lessons

- Using Variables
- Using Decision and Loop Structures
- Using Arrays and Collections
- Performing Error Handling in Visual Basic 2005

Lab: Writing Basic Code in Visual Basic 2005

- Create and Initialize a Sorted Collection
- Add Items to the Collection
- Locate an Item in the Collection
- Filter Exceptions

After completing this unit, students will be able to:

- Use variables to manage data.
- Control flow of execution by using decision and loop structures.
- Use arrays and collections.
- Perform error handling in Visual Basic 2005.

Module 4: Working with Classes and Objects in Visual Basic 2005

This module teaches students how to implement object-oriented programming (OOP) in Visual Basic 2005. It also shows how to define classes, their properties, their methods, and how to implement inheritance from classes and interfaces. Students will also learn about the life cycle of an object.

Lessons

- Building Classes
- Managing the Life Cycle of an Object
- Inheritance in Visual Basic 2005

Lab: Working with Classes and Objects in Visual Basic 2005

- Derive a Class from an Existing Class
- Overload Methods
- Handle Unmanaged Objects
- Instantiate and Initialize an Object

After completing this unit, students will be able to:

- Build classes in Visual Basic 2005.
- Manage the life cycle of an object.
- Implement inheritance in Visual Basic 2005.

Module 5: Deploying Microsoft .NET Framework Applications

This module introduces students to the deployment of .NET Framework applications, and focuses on requirements and options for deploying applications developed in Visual Basic 2005. Students will also learn about the various deployment tools like XCOPY and ClickOnce.

Lessons

- Deploying the .NET Framework
- Creating Deployment Projects
- Managing Deployed Applications
- Using Shared Assemblies

Lab: Deploying Microsoft .NET Framework Applications

- Create a Setup and Deployment Project in an Existing Solution
- Add Primary Output from a Client Project
- Add Primary Output from a Component Project

After completing this unit, students will be able to:

- Deploy the .NET Framework applications.
- Create deployment projects.
- Manage deployed applications.
- Deploy assemblies that are shared by multiple applications.