Microsoft® Visual Basic® 2005: Developing Applications

with Ken Getz and Robert Green

LEVEL 1 — Fundamentals of Windows Forms and Data Access

In level 1 you will learn how to use Visual Studio 2005 and Visual Basic 2005 to build Windows applications that run on the .NET 2.0 platform. You will become familiar with the Windows Forms, Windows Forms controls, and Windows Forms events, focusing on features new in Visual Studio 2005. You will learn how to access data using ADO.NET and quickly create data-aware applications, using new data-binding techniques. Learn to build solid applications using the Try/Catch block and Exception object for efficient error handling. Master working with files and folders and use stream-based objects to read and write data.

Introduction to Windows Forms
- Yes, .NET Does Windows
- Adding Controls to a Form
- A Peek behind the Scenes
- Adding Event Handling Code
- Adding a Menu to the Form
- Adding Non-Graphical Components

Taking Advantage of the Form Event Model
- Handling Events
- Displaying Forms
- Creating Dialog Forms
- Form Events
- Keyboard Events
- Mouse Events
- Validating User Input

Common Windows Forms Controls
- Investigating Windows Forms Controls
- Label, TextBox, and Button
- CheckBox and RadioButton
- ComboBox, ListBox, and CheckedListBox
- LinkLabel, NumericUpdown, PIctureBox and ProgressBar

Exception Handling
- Perspectives on Exception Handling
- Getting Started with Exception Handling
- Adding a Simple Try/Catch Block
- Unhandled Exceptions
- Using an Exception Object
- Catching Specific Exceptions
- Raising Errors
- Running Code Unconditionally

Working with Strings and Dates
- Basic .NET Data Types
- Working with Text: The String Class
- Working with Dates and Times

Accessing Data
- Overview of ADO.NET
- Connecting to Data
- Executing Commands
- Working with Data
- Choosing an ADO.NET Provider

Data Binding Techniques
- Data Binding Basics
- Creating a Data Source
- Creating Data-Bound Forms

- Data Binding Components and Controls
- Displaying Data from Related Tables
- Displaying Data from Lookup Tables
- Adding Search Capabilities to a Form
- Filtering by Values from a Lookup Table
- Working with Local Data

Using the Data Controls
- Display Data using the DataGridView Control
- Make the Most of the DataGridView Control
- Understand the BindingSource and BindingNavigator Controls

Handling Input/Output Tasks
- Introducing the System.IO Namespace
- Selecting Files
- Browsing for Folders
- Handling Path Information
- Working with Directories and Files
- Using Stream-Based Objects to Read and Write File Contents

Project Settings in Visual Studio 2005
- Understand the Project Properties Window
- Controlling the Build Process
- Debug Settings
- Managing References
- A Quick Introduction to Security Settings

This course includes 72+ hours of total training time...
- 24+ hours of media run time
- 1,100+ pages of printable courseware
- Step-by-step hands-on lab exercises
- Pre/post exams
- Sample code

YOUR CHOICE OF FORMATS:

CD-ROM	16 CDs
DVD-ROM	2 DVDs

LEVEL 2 — Windows Forms Controls, Debugging and Deployment

In level 2 you will learn how to work with menus and toolbars, container controls, and complex Windows Forms controls. You'll learn how to use new .NET 2.0 features like Application events and the My namespace. You will become familiar with Event logging and breakpoints for effective debugging and see how to build MDI-based applications. Learn how to utilize legacy COM components and the Win32 API. Deploy your application effortlessly by incorporating Click-Once deployment.

Working with My Namespace
- Introducing the My Namespace
- Working with My Classes and their Members
- Introducing Resources and Settings
- Using My.Forms, My.Resources, My.WebServices, and My.Settings
- Using Application Events

Debugging Your Applications
- Configuring the Debugging Environment
- Debugging Syntax Errors
- Configuring Debugging in Visual Studio
- Setting Breakpoints and Stepping through Code
- Exploring the Debugging Windows
- Using New Visual Studio 2005 Debugging Features
- Writing to the Windows Event Log

Container Controls
- Working with Containers
- Panel and GroupBox
- Tab Control
- SplitContainer
- TableLayoutPanel and FlowLayoutPanel

Menus and Toolbars
- Not Your Father's Menus and Toolbars
- Introducing the ToolStrip Control
- Working with the MenuStrip Control
- Moving and Docking: the ToolStripContainer Control
- Modifying Menus and Toolbars
- Working with Menus and Toolbars in Code

Creating MDI Applications
- Working with MDI Parents and Children
- Managing Menus and Toolbars in MDI Applications
- Detecting Which Child is Active
- Handling Shutdown of MDI Applications

Complex Windows Forms Controls
- Digging Deeper into Windows Forms Controls
- DateTimePicker, ListView
- MaskedTextBox
- MonthCalendar, RichTextBox
- NotifyIcon, ToolTip
- TreeView, WebBrowser

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

Windows Forms Components
- Working with Windows Forms Components
- BackgroundWorker Component
- FileSystemWatcher Component
- PerformanceCounter Component
- Process Component
- ServiceController Component
- Timer Component

Interoperability
- Calling COM Components
- You Still Can Call the Win32API
- Introducing Creating and Consuming Web Services

Deploying Applications using Click-Once
- Publishing an Application
- Setting Publish Options
- Updating a Deployed Application
- Rolling Back an Update
- What Happens When You Publish an Application?
- What Happens When You Publish an Update to an Application?
- ClickOnce and Security
- Using the Deployment API to Manage Updates