Mastering Microsoft Visual Basic 6 Fundamentals

7 Days

Introduction

This course provides the necessary intermediate-level skills to developers new to Microsoft Visual Basic programming. The course also provides the necessary foundation for those moving on to the rest of the Visual Basic courses in this track.

Prerequisites

This course assumes that the student has experience and knowledge in the following areas:

- Introduction to Programming with Visual Basic 6, which teaches the basics of programming with Visual Basic.
- Mastering Visual Basic 6 Fundamentals, which covers all aspects of programming with Visual Basic.
- Principles of Business Application, which covers the principles behind the design of sound business software applications.

Objectives

At the end of this course participants will be able to:

- Build custom, multiple-form applications
- Incorporate dynamic menus, pop-up menus, status bars, and custom toolbars into applications
- Implement form-level and field-level input validation
- Debug applications using debugging tools provided in VB6
- Use standard controls, control arrays, and create controls dynamically
- Execute centralized error-handling in applications
- Use the data control for database access
- Implement Drag and Drop in Visual Basic applications
- Use Microsoft ActiveX Controls in Visual Basic applications
- Create setup programs to distribute applications

Outline Course 1303

Chapter 1: Introduction to Application

- Development Using Visual Basic
- Conventions used in this course
- Features of Visual Basic
- Editions of Visual Basic
- Visual Basic terminology
- Working in the development environment
• Event-driven programming
• Creating a program in Visual Basic
• Project and executable files
• Visual Basic reference materials

Chapter 2: Visual Basic Fundamentals

• Objects
• Controlling objects
• Introduction to forms
• Introduction to controls
• Basic controls

Chapter 3: Working with Code and Forms

• Understanding modules
• Working with code
• Other code navigation features
• Code documentation and formatting
• Setting environment options
• Setting code formatting options
• Automatic code completion features
• Interacting with the user
• Using the MsgBox function
• Using the InputBox function
• Working with code statements
• Managing forms

Chapter 4: Variables and Procedures

• Overview of variables
• Declaring variables
• Variable scope
• Using arrays
• User-defined data types
• Converting data types
• Using constants
• Working with procedures
• Working with dates and times
• Using the Format function
• Manipulating text strings

Chapter 5: Controlling Program Execution

• Comparison and logical operators
• Using If...Then statements
• Using Select Case statements
• Overview of looping structures
• Using Do...Loop structures
• For...Next statement
• Exiting a loop
Chapter 6: Debugging

- Types of errors
- Break mode
- Using the Debug toolbar
- Using the Watch window
- Using the Immediate window
- Using the Locals window
- Tracing program flow with the Call Stack

Chapter 7: Working with Controls

- Types of controls
- Overview of standard controls
- Using ComboBox and ListBox controls
- Using OptionButton and Frame controls
- Working with selected text
- Advanced standard controls
- ActiveX controls
- Insertable objects

Chapter 8: Data Access Using the ADO Data Control

- Overview of ActiveX data objects
- Visual Basic data access features
- Relational database concepts
- Using the ADO Data control to access data
- Structured query language (SQL)
- Manipulating data
- Using Data Form Wizard

Chapter 9: Input Validation

- Field-level validation
- Using text box properties to restrict data entry
- Using the Masked Edit control
- Form-level validation
- Form events used when validating data

Chapter 10: Error Trapping

- Overview of run-time errors
- Overview of the error handling process
- The Err object
- Errors and the calling chain
- Errors in an error-handling routine
- Inline error handling
- Error-handling styles
- General error-trapping options in Visual Basic

Chapter 11: Enhancing the User Interface
• Menus
• Status bars
• Toolbars

Chapter 12: Drag and Drop

• Overview of drag and drop
• Mouse events
• Drag-and-drop basics

Chapter 13: More About Controls

• Collections
• Using control arrays

Chapter 14: Finishing Touches

• User interface design principles
• When to use another application for development
• Creating a default project
• Distributing your program
• The setup wizard
• Review: steps to creating a Visual Basic program
• Development resources