

Programming Access® 2003: Hands-On - 4 Days

Course 377 Overview

- You Will Learn How To**
- Develop applications with Microsoft Access 2003 using Visual Basic for Applications (VBA)
 - Identify and populate event properties to satisfy design specifications
 - Modify object properties and invoke object methods to customise applications
 - Create VBA statements using variables and built-in functions
 - Apply Data Access Objects (DAO) to incorporate business rules
 - Integrate Access with external applications through automation
- Course Benefits** Microsoft Access users can build applications by maximising rapid application development techniques and advanced VBA capabilities. In this hands-on course, you gain practical experience programming VBA to build Access solutions. You learn to write and debug code that incorporates business rules with Access objects.
- Who Should Attend** Those planning to create business solutions with Microsoft Access 2003 or a prior version of Access. Course 307, "Access 2003 Comprehensive Introduction", or similar experience is assumed. Programming experience is useful, but not required.
- Hands-On Training** Throughout this course, extensive hands-on exercises provide you with practical experience programming Access using a variety of tools and techniques. Exercises include:
- Adapting business requirements into VBA code
 - Exploiting Forms and controls by manipulating properties and executing methods
 - Incorporating logic and iteration statements
 - Programming Data Access Objects to manipulate data at the code level
 - Implementing error-handling code

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Course 377 Outline

Access Macros and VBA

The power of macros

- Creating decision-making macros
- Advantages and disadvantages of macros
- Converting macros to VBA

Visual Basic Editor

- Navigating the Project Explorer
- Editing code with the Code Window

Event-Driven Programming

Building event procedures

- Binding macros to event properties
- Building events with wizards

Improving code readability

- Applying IntelliSense tools
- Exploiting coding techniques

Event logic

- Identifying the order of events
- Assigning requirements to events

Manipulating Objects

Objects and Object models

- Methods
- Properties
- Events
- Accessing and using individual objects
- Applying the Access Object Model

Programming Access objects

- Application
- Forms collection
- Form and report object
- Controls collection
- Bang (!) vs. Period (.)
- Exploiting the ComboBox, ListBox, Option Group and TextBox
- Writing code with the Me keyword

Object Browser

- Finding objects
- Object libraries
- Locating methods, properties and events
- Gateway into the Help system

Language Concepts

Creating variables

- Naming rules and conventions
- Declaring objects
- Implicit and explicit conversions
- The scope and life of variables

Implementing built-in functions

- Date, string and file system functions
- Integrating symbolic and intrinsic constants

Total Control with VBA

Controlling execution sequence

- Creating decision-making logic
- Building iteration statements
- Queries and the Immediate If (IIf)
- Populating fixed and dynamic arrays

Sub and function procedures

- Arguments
- Calling
- MsgBox
- Returning values

Operators and expressions

- Defining comparative statements
- Constructing relational expressions

Data Programming

Data Access Objects (DAO)

- Manipulating data using Recordsets
- Building and modifying QueryDefs
- Populating parameter queries

Verifying Form data

- Bound and unbound forms and controls
- Changing data sources within code
- Executing SQL statements

Advanced Functionality

Communicating with SQL Server

- Utilising pass-through queries
- Binding ADO Recordsets to forms

Automation with Access

- Early vs. late binding
- Controlling external applications

Trapping Errors and Debugging

Develop error handling

- Classifying errors
- Working with the Err object
- Managing runtime errors

Exploiting debugging tools

- Testing and validating code
- Troubleshooting logic issues