

MS Access VBA

Duration: 2 Days Using Watsonia manual WPV557

Outcome: At the completion of this course participants will be able to:

- understand some of the aspects of developing applications in Access 2003
- use macros in Access 2003
- understand the programming environment and how forms and modules are used in it
- create and work with subroutines and function procedures
- create and work with variables
- communicate with the user through input boxes and message boxes
- program decision structures using IF and CASE statements
- develop a variety of programming loops for repeating operations
- use the DoCmd object to perform most of the operations associated with a database
- use DAO to handle working with data in your programs
- use ADO to handle working with data in your programs
- use the debugging features of VBA to locate and identify errors
- develop safeguards in your program and prevent unforeseen errors.

Prerequisites This course is designed for participants with little or no knowledge of programming. However a sound working knowledge of Access 2003 is essential including formatting, reports, queries and relational databases.

Content:

- **Development Basics**
 1. The Access Development Environment
 2. The Importance Of Splitting Databases
 3. Maintaining Links
 4. Using The Database Splitter
 5. Using Queries For Reports And Forms
 6. Access Run-Time
 7. Understanding Client/Server
- **Macros And VBA**
 1. Macro Overview
 2. Creating Macros
 3. Assigning Macros
 4. Creating More Complex Macros
 5. Converting Macros To VBA Code
 6. Macros Versus VBA
- **VBA Essentials**
 1. Programming Environment Overview
 2. The Role Of Forms
 3. Creating A Startup Form
 4. Understanding Modules
 5. Code Behind Forms

6. Standard Code Modules
7. Standard Vs Class Modules
8. Naming Conventions
- **VBA Subroutines**
 1. Understanding Modules In Access
 2. The Anatomy Of A Module
 3. Creating A Subroutine
 4. Creating A Function
 5. Calling Procedures
 6. Passing Parameters
 7. Returning Values
 8. Scoping Procedures
- **Variable VBA**
 1. Overview Of Variables
 2. Creating String Variables
 3. Option Explicit
 4. Working With Numbers
 5. Dealing With Overflows
 6. Working With Decimals
 7. Working With Dates
 8. Default Values
 9. Scoping Variables
 10. Local Variables
 11. Module-Wide Variables
 12. Passing Parameters
 13. Passing Parameters By Value
- **Interactive VBA**
 1. The Act Of Communicating
 2. Creating A Simple Input Box
 3. Creating More Elaborate Input Boxes
 4. Global Positioning
 5. Simple Message Boxes
 6. Creating Larger Messages
 7. Breaking A Message Line
 8. Customising Icons And Buttons
 9. Message Box Functions
 10. Responding To Different Buttons
- **Decisive VBA**
 1. Decisions Overview
 2. Creating An In-Line If
 3. Creating A Block If
 4. Multiple If
 5. Multiple If Using Text
 6. Using Case Statements
 7. Value Ranges In Case Statements
 8. Case Statements With OR
 9. Asking Yes/No Questions
- **Looping VBA**
 1. Program Loops

2. Creating A While Loop
 3. Taking Care Of Counters
 4. Creating An Until Loop
 5. For Each Loops
 6. Exiting From Loops
 7. For Next Loops
- **The DoCmd Object**
 1. Overview Of DoCmd
 2. Navigating With DoCmd
 3. Moving Through Records
 4. Filtering Records With DoCmd
 5. Opening A Form With DoCmd
 6. Opening A Report With DoCmd
 7. Closing A Form
 8. Creating Variable Reports
 - **ActiveX Data Objects - Tables**
 1. Overview Of ADO
 2. Setting References Using VBA
 3. Creating A Table With ADO
 4. Removing A Table Using ADO
 5. Populating A Form Using ADO
 6. Dealing With An Empty Table
 - **ADO Forms & Recordsets**
 1. Overview Of ADO With Forms & Recordsets
 2. Navigating Records In A Form
 3. Finding A Record
 4. Updating A Record
 5. Deleting A Record
 6. Adding A New Record
 - **Debugging VBA**
 1. Overview Of Debugging
 2. Setting A BreakPoint
 3. Setting Additional Breakpoints
 4. Stepping Through A Procedure
 5. Viewing The Call Stack
 6. Using The Locals And Immediate Windows
 7. Adding A Watch
 8. Deleting A Watch
 - **Handling Errors In VBA**
 1. Error Handling Overview
 2. Understanding Common Errors
 3. Creating A Simple Error Handler
 4. Understanding The Error Object Model
 5. More Elegant Error Handling
 6. Resuming From Errors
 7. Forcing An Error
 8. Creating Custom Errors