Access 2013/2016 Programming with VBA

Overview

Students learn the Visual Basic for Applications language as well as the Access classes and objects needed to create VBA scripts to automate Access. Participants create procedures and functions using the VBA language and Access objects.

Target Audience

Appropriate introductory and advanced courses plus several weeks of practice. No programming experience is required.

Course Objectives

Students learn the Visual Basic for Applications language as well as the Access classes and objects needed to create VBA scripts to automate Access. Participants create procedures and functions using the VBA language and Access objects. As well, debugging and error handling techniques are reviewed.

Course Outline

Getting Started

Introduction to Programming in Access
Why Program in Access?
Understanding the Development Environment
Using Visual Basic Help

Working with Procedures and Functions

Understanding Modules
Creating a Standard Module
Understanding Procedures
Creating a Sub Procedure
Calling Procedures
Using the Immediate Window to Call Procedures
Creating a Function Procedure
Naming Procedures
Organizing Code and Procedures
Working with the Code Editor

Schedule

Class Length: 3 Days

G2R = “Guaranteed to Run” | OLL = “Online LIVE”
ILT = “Instructor-Led-Training”

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<th>End Time</th>
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Register Online
Understanding Objects

- Understanding Classes and Objects
- Navigating the Access Object Hierarchy
- Understanding Collections
- Using the Object Browser
- Working with the Application Object
- Understanding the Form Object
- Working with Properties
- Using the With Statement
- Working with Methods
- Understanding the DoCmd Object
- Working with Events
- Understanding the Order of Events

Using Expressions, Variables, and Intrinsic Functions

- Understanding Expressions and Statements
- Declaring Variables
- Understanding Data Types
- Working with Variable Scope
- Working with Variable Lifetime
- Considering Variable Scope and Lifetime Together
- Using Intrinsic Functions
- Understanding Constants
- Using Intrinsic Constants
- Using Message Boxes
- Using Input Boxes

Controlling Program Execution

- Understanding Control-of-Flow Structures
- Working with Boolean Expressions
- Using the If...End If Decision Structures
- Using the Select Case...End Select Structure
- Using the For...Next Structure
- Using the For Each...Next Structure
- Using the Do...Loop Structure
- Guidelines for use of Branching Structures

Working with Recordsets

- Declaring and Creating Object Variables
- Working with the DAO Recordset Object
Debugging Code

Understanding Errors
Using Debugging Tools
Setting Breakpoints
Setting Break Expressions
Using Break Mode during Run Mode
Stepping through Code
Determining the Value of Expressions

Handling Errors

Understanding Error Handling
Understanding VBA's Error Trapping Options
Trapping Errors with the On Error Statement
Understanding the Err Object
Writing an Error-Handling Routine
Working with Inline Error Handling