

Software Solutions

Microsoft® Excel - Macros & Programming

Stage Four

Versions 2007, 2010, 2013 (365) and 2016 (365)

Course Objectives:

The aim of this course is to extend the Excel users knowledge of macros by introducing direct programming skills in Visual Basic for Applications. This course will provide the Excel user with the VBA skills necessary to automate tasks including importing and exporting data, creating and modifying charts, reporting and manipulating spreadsheet data, and creating interactive user forms. If you have any questions please contact Cathi Barker (cathi@xtra.co.nz)

Who Should Attend:

Participants of this course must be completely conversant with the material covered in the Excel Stage One The Essentials, Stage Two Functions, Charts & More and Stage Three Data Manipulation Course Outlines.

Course Outline/Table of Contents:

CHAPTER 1. WORKING WITH MACROS

<input type="checkbox"/> ENABLING THE DEVELOPER TAB	<input type="checkbox"/> MACRO SECURITY
<input type="checkbox"/> MACRO ENABLED WORKBOOKS	<input type="checkbox"/> RECORDING A MACRO
<input type="checkbox"/> RUNNING A MACRO	<input type="checkbox"/> ASSIGNING A SHORTCUT KEY TO A MACRO AFTER A MACRO IS RECORDED
<input type="checkbox"/> VIEW THE MACRO CODE	<input type="checkbox"/> THE VISUAL BASIC EDITOR (VBE)
<input type="checkbox"/> PROJECT EXPLORER, PROPERTIES AND CODE WINDOW	<input type="checkbox"/> WORKING WITH THE VBE
<input type="checkbox"/> ALTERING AND RUNNING CODE	<input type="checkbox"/> VIEW CODE AS YOU RECORD A MACRO
<input type="checkbox"/> REMOVE EXCESS STATEMENTS – WEND STATEMENT	<input type="checkbox"/> RUN KEY F5
<input type="checkbox"/> WORKING WITH UNDERSCORE	<input type="checkbox"/> WORKING WITH MODULES

CHAPTER 2. CREATING A LARGE MACRO

<input type="checkbox"/> IMPORTING A FILE	<input type="checkbox"/> STEP INTO CODE
<input type="checkbox"/> VARIABLES, AUTO LIST MEMBERS AND AUTO QUICK INFO	<input type="checkbox"/> DECLARING VARIABLES AND THEIR DATA TYPES
<input type="checkbox"/> REFERRING TO THE ACTIVE SHEET	<input type="checkbox"/> FILL MISSING LABELS
<input type="checkbox"/> ADDING DATES	<input type="checkbox"/> VARIABLES AND INPUT BOXES
<input type="checkbox"/> APPENDING TO DATABASE	<input type="checkbox"/> RELATIVE REFERENCES & PROCEDURES LIST
<input type="checkbox"/> DELETE WORKSHEET & TURN OFF ALERTS	<input type="checkbox"/> ASSEMBLING MACROS TOGETHER

CHAPTER 3. MODULES, VARIABLES AND DATA TYPES

<input type="checkbox"/> DECLARING VARIABLE DATA TYPES	<input type="checkbox"/> USING VARIABLES WITH INPUT BOXES
<input type="checkbox"/> USING VARIABLES WITH MESSAGE BOXES	<input type="checkbox"/> VARIABLES AND INPUT BOXES
<input type="checkbox"/> APPLICATION.INPUTBOX STATEMENT	<input type="checkbox"/> APPLICATION INPUT BOX AND DO LOOP
<input type="checkbox"/> DO LOOP STATEMENT	<input type="checkbox"/> IF STATEMENTS EXPLAINED
<input type="checkbox"/> FOR NEXT STATEMENT EXPLAINED	<input type="checkbox"/> EXIT SUB EXPLAINED
<input type="checkbox"/> APPLICATION INPUT BOX, EXIT SUB AND FOR NEXT STATEMENT	<input type="checkbox"/> REFERRING TO CELLS, RANGES, ROWS AND COLUMNS
<input type="checkbox"/> CELL REFERENCE AND ACTIVE CELL VALUE	<input type="checkbox"/> REFERRING TO ROWS, COLUMNS, CELLS, RANGES AND USING COUNT

CHAPTER 4. WORKBOOK AND SHEET OBJECTS

<input type="checkbox"/> WORKING WITH THE ACTIVE WORKBOOK AND A SHEET	<input type="checkbox"/> WITH AND END WITH OR WEND STATEMENTS
<input type="checkbox"/> WORKBOOK OBJECTS AND WEND STATEMENTS	<input type="checkbox"/>

CHAPTER 5. FOR EACH MEMBER IN A COLLECTION

<input type="checkbox"/> USING FOR EACH ... NEXT IN A RANGE	<input type="checkbox"/> FOR EACH ... NEXT RANGE
<input type="checkbox"/> FOR EACH ... NEXT IN A WORKBOOK	<input type="checkbox"/> FOR EACH ... NEXT FOR A VARIABLE RANGE OF CELLS

CHAPTER 6. SELECT CASE STATEMENT

<input type="checkbox"/> SELECT CASE THE THEORY	<input type="checkbox"/> SELECT CASE
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CHAPTER 7. NAMED RANGES

<input type="checkbox"/> CREATING A NAMED RANGE	<input type="checkbox"/> REFERRING TO AND SELECTING A NAMED RANGE
<input type="checkbox"/> DELETING A NAMED RANGE	<input type="checkbox"/>

CHAPTER 8. CONSTANTS

<input type="checkbox"/> CONSTANTS	<input type="checkbox"/>
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CHAPTER 9. DATA SCOPE AND SURVIVAL

<input type="checkbox"/> SCOPE OF A VARIABLE	<input type="checkbox"/> SURVIVAL OF A VARIABLE
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CHAPTER 10. FUNCTIONS

<input type="checkbox"/> SELECT CASE FUNCTION	<input type="checkbox"/> USER DEFINED FUNCTION
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CHAPTER 11. STRING FUNCTIONS

<input type="checkbox"/> FUNCTION: CHR()	<input type="checkbox"/> CHARACTER SET (0 – 127)
<input type="checkbox"/> CHARACTER SET (128 – 255)	<input type="checkbox"/> FUNCTION: INSTR()
<input type="checkbox"/> FUNCTION: LCASE ()	<input type="checkbox"/> FUNCTION: LEFT()
<input type="checkbox"/> FUNCTION: LEN()	<input type="checkbox"/> FUNCTION: MID()
<input type="checkbox"/> FUNCTION: RIGHT()	<input type="checkbox"/> FUNCTION: STRCONV()
<input type="checkbox"/> FUNCTION: UCASE ()	<input type="checkbox"/>

CHAPTER 12. WORKING WITH CHART OBJECTS

<input type="checkbox"/> REFERRING TO AN EMBEDDED CHART	<input type="checkbox"/> REFERRING TO A CHART SHEET
<input type="checkbox"/> CREATE A CHART	<input type="checkbox"/> MODIFY THE CHART
<input type="checkbox"/> USER DEFINES CHART DATA SOURCE	<input type="checkbox"/>

CHAPTER 13. WORKING WITH EVENT PROCEDURES

<input type="checkbox"/> WORKBOOK EVENTS	<input type="checkbox"/> WORKSHEET EVENTS
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CHAPTER 14. DEBUGGING YOUR CODE

<input type="checkbox"/> COMPILE VBAPROJECT	<input type="checkbox"/> DEBUG TOOLBAR
<input type="checkbox"/> RUN, STEP INTO AND BREAKPOINTS	<input type="checkbox"/> THE IMMEDIATE WINDOW
<input type="checkbox"/> DEBUG PRINT STATEMENTS	<input type="checkbox"/> THE LOCALS WINDOW

CHAPTER 15. ERROR HANDLING

<input type="checkbox"/> TRAPPING ERRORS	<input type="checkbox"/> HOW TO ENTER ERROR HANDLING CODE
<input type="checkbox"/> ERROR HANDLER	<input type="checkbox"/>

CHAPTER 16. PROTECTION

<input type="checkbox"/> PROTECTING A WORKSHEET	<input type="checkbox"/> UNPROTECTING A WORKSHEET
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CHAPTER 17. USER FORMS

<input type="checkbox"/> CREATING A USER FORM	<input type="checkbox"/> OPENING A NEW USER FORM AND THE TOOLBOX
<input type="checkbox"/> ADDING CONTROLS	<input type="checkbox"/> CONTROL TAB ORDER AND VIEW THE FORM
<input type="checkbox"/> CREATE USERFORM CODE	<input type="checkbox"/> CREATE DATA ENTRY MACRO BUTTON
<input type="checkbox"/> ADD CODE TO COMMAND BUTTONS OK AND CANCEL	<input type="checkbox"/> SET COMBO BOX ROW SOURCE
<input type="checkbox"/> SET UP VARIABLES	<input type="checkbox"/> EDITING CODE TO WORK WITH FORM CONTROLS