

Preface

Microsoft Excel is a powerful spreadsheet program; in fact, it's the most widely used spreadsheet program worldwide, but Excel is a lot more than just a spreadsheet program. Unknown to many users, Excel is also a sophisticated platform for development of custom applications. Lurking behind its mild-mannered spreadsheet disguise is a powerful and full-featured programming language called Visual Basic for Applications (VBA). If you have recorded and played back an Excel macro, you have used VBA — perhaps without being aware of it.

There's much more to VBA programming than recording macros, however. Nearly any user can write VBA programs to perform a wide variety of tasks in Excel, ranging from the simple, such as automating financial calculations, to the complex, such as creating a data entry system with custom forms and data validation. Unfortunately, many users shy away from taking advantage of Excel's programmability because it seems too complicated, and they cannot find a good source of information to guide them through the learning process. Excel programming can be somewhat complicated, which is unavoidable for such a powerful tool, but the truth is that almost any reasonably computer-literate person can learn how to program in Excel. That's where this book comes in handy.

Who Should Read This Book

This book is aimed at anyone who wants to use programming to improve his or her Excel skills. Perhaps you only want to write programs for your own use, or maybe you need to create Excel programs for use by your coworkers. In either situation, this book is aimed at you. The book was written specifically with the nonspecialist in mind. You do not need to have any programming knowledge or experience to use this book because everything from square one is explained. Of course, if you do have some programming experience, it will not hurt, but the important point is that such experience is not required.

Weekend Crash Course Layout and Features

This book contains 30 sessions, each of which is designed to be completed in about 30 minutes. Each session has a review section at the end and a list of questions so you can test your knowledge. The sessions are organized into six parts; the main purpose of each part is

to provide a convenient breaking point to help you in pacing your progress. At the end of each part, you'll find additional questions related to that part's session topics. The answers for the part review questions are provided in Appendix A.

Part I: Friday Evening

The first session provides an introduction to programming with Excel, including an overview of many of the advantages. You'll also find some basic information about programming in this session.

The second session teaches you how to use the VBA Code Editor. This tool is part of the Excel installation, and you use it to create, test, and run your programs.

Session 3 deals with the Excel Object Model. This is the set of tools that the Excel application makes available for you to use in your programs.

Session 4 introduces you to the VBA language, your primary tool for writing programs.

Part II: Saturday Morning

Sessions 5 through 9 cover the VBA language. You need a good knowledge of the VBA language's elements and syntax to write programs. This includes learning about operators, control constructs, procedures, and modules, as well as how to work with dates, times, and text. The final session in this part, Session 10, shows you how to work with Excel's ranges and selections.

Part III: Saturday Afternoon

Sessions 11 through 14 cover the fundamentals of controlling Excel through VBA code. You'll learn how to work with columns, rows, and cells; how to program with custom formulas and built-in functions; and how to format a worksheet. The last two sessions deal with find and replace operations and creating custom toolbars.

Part IV: Saturday Evening

Sessions 17 and 18 show you how to use Excel's powerful charting capabilities in your programs. Then Sessions 19 and 20 present the basics of creating custom dialog boxes for your programs with Excel's user forms.

Part V: Sunday Morning

Sessions 21 and 22 finish the coverage of user forms, including a complete example. Sessions 23 through 26 deal with the topics of Excel events, security considerations, and debugging distributing an application, and creating custom classes.

Part VI: Sunday Afternoon

The remaining sessions deal with a variety of topics, including runtime errors, database tasks, add-ins, and online help.

I recommend that you work through the sessions in order. At the very least you should complete Sessions 1 through 9 before branching off to other topics.

The Companion Web Site

On the book's companion Web site, you'll find code listings of sample programs and a self-assessment test, which consists of over 80 multiple-choice and true or false questions. Just go to www.wiley.com/compbooks/aitken.

Features

As I have mentioned, each session is designed to take about 30 minutes. It's not a race, however, so don't worry if it takes you a bit longer. It's what you learn that's important. The following time-status icons let you know how much progress you've made throughout each session.



***30 Min.
To Go***



***20 Min.
To Go***



***10 Min.
To Go***



Done!

The following icons identify bits of information that are set apart from the text:



A note is an important bit of information that you should know about.



A tip is a suggestion for an easier or faster way to do something when programming Excel.



This icon warns you of something you should never do.



This icon points you to other sessions where related material can be found.