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Learn to:

- Navigate the Access interface and understand database architecture

- Build tables to organize data and create forms for easy data entry

- Query your data and produce reports

- Build custom interfaces for all users

Laurie Ulrich Fuller
Ken Cook

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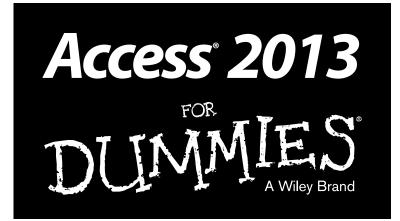- Illustrated Articles
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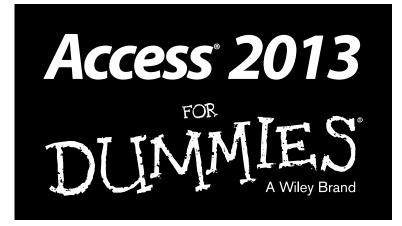
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About the Authors

Laurie Ulrich Fuller has been writing about and teaching people to use Microsoft Office for more than 20 years. She's been there through every new version of Access as Office has evolved to meet the needs of users from all walks of life — from individuals to huge corporations, from growing businesses to non-profit organizations.

In the meantime, Laurie has personally trained more than 20,000 people to make better, more creative use of their computers, has written and co-written 30+ nationally published books on computers and software — including several titles on Microsoft Office. In the last few years, she's also created several online training courses, teaching online students to use Microsoft Office and Adobe Photoshop.

Laurie's own firm, Limehat & Company, offers training and educational materials as well as graphic design, marketing, promotions, and web-development services. She invites you to contact her with your Office-related questions at `help@limehat.com` and to visit her website at `www.limehat.com`.

Ken Cook has built and managed a successful computer consulting business (now called Cook Software Solutions, LLC) since 1990. He began as a trainer — training numerous users (too many to count!) on a variety of software packages — specializing in Microsoft Office. Currently he "dabbles in training" (specializing in online synchronous training), but his main focus is creating expert Microsoft Office solutions and Microsoft Access database solutions for Fortune 500 and small business clients.

Ken is also a published author on Microsoft Excel, having contributed chapters on macros and *VBA to Special Edition: Using Excel 2000* and *Special Edition: Using Excel 2002* published by Que. Ken also contributed Microsoft Access chapters to the book *How to Do Everything with Office XP* published by Osborne and coauthored the previous edition of this book: *Access 2010 For Dummies* published by Wiley.

Prior to his career in computers, Ken was a Product Manager for Prince Manufacturing, Inc. He is a graduate of Syracuse University with a bachelor's degree in Marketing. He can be contacted through his web site (`www.kcookpcbiz.com`) or by e-mail (`mailto:ken@kcookpcbiz.com`).

Contents at a Glance

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Introduction

W elcome! Thank you for picking up this book. We assume you've done so because you're hoping it will explain how to use Microsoft Access 2013. And of course, as the authors, we believe this was a wise decision. We're quite certain that this is the best book for you to use to understand Access 2013 — but not just because we wrote it. Rather, we base this belief on the fact that both of us have been teaching and using Access for a very long time, and we know how to share what we know with our students. That's right, you're now one of our students — at least that's how we feel about you as our reader. Doesn't that make you feel all warm and fuzzy? We hope so.

Of course, being a normal human being, you probably have work to do, and you're probably juggling a whole lot of information. This means you need to use Access. You need it to organize your data. You need it to store all the information that's currently spilling out of notebooks, file drawers, your pockets, your glove compartment, your smart phone, your brain, everywhere. You need it so you can produce reports that make you look like the genius you are. You need it so you can create cool forms that will help your staff enter all the data you've got stacked on their desks — and in a way that lets you know the data was entered properly so that it's accurate and useful. You need Access so you can find little bits of data out of the huge pool of information you need to store. So that's it. You just need it.

About This Book

With all the power that Access has (and that it therefore gives *you*), there comes a small price: complexity. Access isn't one of those applications you can just sit down and use "right out of the box." It's not scarily difficult or anything, but there's a lot going on — and you need some guidance, some help, and some direction to really use it and make it bend to your will. And that's where this book — a "reference for the rest of us" — comes in.

So you've picked up this book. Hang on to it. Clutch it to your chest and run gleefully from the store, or click the Add to Shopping Cart button and sit back with an expression of satisfaction and accomplishment on your face, because you've done a smart thing. When you get home, or when the book arrives in person (or by download to your hand-held device), start reading — whether you begin with Chapter 1 or whether you dive in and start with a particular feature or area of interest that's been giving you fits. Just read, and then go put Access to work for you.

Conventions Used in This Book

As you work with Access 2013, you're going to need to tell it to do things. You'll also find that, at times, Access has questions for you, usually in response to you asking it to do something. This book will show you how to talk to Access, and how Access will talk to you. To show the difference between the two sides of that conversation, we format the commands as follows:

This is something you type into the computer.

```
This is how the computer responds to your command.
```

Because Access *is* a Windows program, you don't just type, type, type — you also mouse around quite a bit. Here are the mouse movements necessary to make Access (and any other Windows program) work:

- ✔ **Click:** Position the tip of the mouse pointer (the end of the arrow) on the menu item, button, check box, or whatever else you happen to be aiming at, and then quickly press and release the left mouse button.

- ✔ **Double-click:** Position the mouse pointer as though you're going to click, but fool it at the last minute by clicking twice in rapid succession.

- ✔ **Click and drag (highlight):** Put the tip of the mouse pointer at the place you want to start highlighting, and then press and hold the left mouse button. While holding down the mouse button, drag the pointer across whatever you want to highlight. When you reach the end of what you're highlighting, release the mouse button.

- ✔ **Right-click:** Right-clicking works just like clicking, except you're exercising the right instead of the left mouse button.

What You Don't Have to Read

Now that we've told you that you should read the book, we're telling you that you don't have to read *all* of it. Confused? That's understandable, but don't be. This section of the Introduction exists to put your mind at ease so that you won't worry about having to digest every syllable of this book in order to make sense of Access. And more than just being a required section of the Introduction, the heading is true. You don't have to read the whole book.

You should read the chapters that pertain to things you don't know, but you can skip the stuff you do know or that you're fairly sure you don't need to know. If the situation changes and you eventually *do* need to know something, you can go back and read that part later. See? Easy.

If you only use Access at work, and you're using an Access database that some über-geek in your IT department created, chances are you can't tinker with it. Therefore, if you only need to know about using an existing Access database (or unless you have designs on that IT geek's job), you can skip the chapters on designing databases.

Of course, it's pretty useful to know what's happening "behind the scenes," but you don't have to read those chapters if you don't want to. We think you'll find them interesting, and they'll help you understand why certain things work the way they do in the database you use, but it's entirely up to you.

Foolish Assumptions

You need to know only a few things about your computer and Windows to get the most out of *Access 2013 For Dummies.* In the following pages, we presume that you . . .

✔ Know the basics of Windows 7 and Windows 8 — how to open programs, save your files, create folders, find your files once you've saved them, print, and do basic stuff like that.

✔ Have some goals that Access will help you reach. You

• want to build your own databases

and/or

• want to work with databases that other people have created.

✔ Want to use and create queries, reports, and an occasional form.

✔ Have Windows 7 or 8.

If your computer uses Windows 98, 2000, or Vista, you can't run Access 2013.

How This Book Is Organized

So, do you feel ready to dive in? Energized and excited to learn Access? Great. Check out this breakdown of the parts in this book so you know what's coming and can figure out if there's a section you need to look at first. Each part covers a general aspect of Access, and then each part's individual chapters dig into the details.

Part I: Getting Started with Access 2013

In this first part of the book, you'll find out what Access is, what it isn't, how it works, and how you open it up and start using it. You'll find out how to navigate and master the Access workspace — and people who've used previous versions of Access find out about all the new features and tools that are part of Access 2013.

Part I also takes you through the process of planning your database — deciding what to store, how to structure your database, and how to use some of Access 2013's very helpful tools for starting a database with templates — cookie-cutters, to use a fun and accurate metaphor — for a variety of common database designs. Be prepared to pick up some helpful jargon, as you discover a bit about a few specialized terms that you really need to know.

Part II: Setting the Table

Part II takes you a bit deeper, starting out with a chapter on setting up more than one table to store related data — and moving on with chapters on setting up relationships between those tables, customizing the way data is stored in your tables, and ways to control how data is entered into the tables in your database. You'll also find out about tools that create new data in your tables — based on existing data — automatically.

Part III: Data Management Mania

Here you find out all about *forms* — the customized interfaces you create to make it easier to enter, edit, and look at your database. You'll also discover cool ways to share your Access data with other programs and how to bring content from Word documents and Excel worksheets into Access to save time, reduce the likelihood of data-entry errors, and build consistency within all the work you do in Microsoft Office.

Speaking of saving time and building consistency, you'll also learn about the Application Parts feature, through which you can recycle parts of your existing databases to build new ones. You'll also find out about using Access tables on the web, how Office 365 makes use of "the cloud," and how to publish your database to the Internet. Look out, world!

Part IV: Ask Your Data, and Ye Shall Receive Answers

In Part IV, you discover how to ask questions such as "How many customers do we have in Springfield?" and "How long has that weird guy in Accounting worked here?" Of course, you already know how to form and speak sentences that go up at the end (so people know you're asking a question), but when you ask a question in Access, the pitch of your voice rarely makes any difference. You'll need, therefore, to know how to sort, filter, and query your data to get at the information you're storing in your Access database. You'll also want to know more about Action Queries — and these, too, can be found in Part IV.

Part V: Simple and Snazzy Reporting

Reports are compilations of data from one or more tables in your database. That statement might sound a bit scary, because "compilations" has four syllables and you might not be sure what a table is yet. Have no fear, however, because Access provides some cool automatic tools that let you pick and choose what you want in your report, and then it goes and makes the report *for you*. How neat is that?

And if automatic reports aren't good enough for you — if your job relies upon reports not only being informative but also attractive and attention-grabbing, Part V will be like opening a birthday present. Well, not really, but you'll find out about how to set up reports that organize your information logically, how to make sure your reports include page numbers, headings and other information to help people make quick use of the report, and how to include graphics to produce a professional-looking publication, whether viewed onscreen or in print.

Part VI: More Power to You

Part VI gives more power in the form of the Access Analyzer, a tool that tunes up your database for better performance. It also gives you more power by showing you how to create a user interface that controls what people see, which tables they can edit, and how they work with your database overall.

Part VII: The Part of Tens

The format of these chapters is designed to give you a lot of information in a simple, digestible fashion so you can absorb it without realizing you're actually learning something. Sneaky, huh?

Appendix: Getting Help

This isn't really a whole part, but it's darn useful. Remember how your mom told you the only foolish question is the one you don't ask? In this appendix, you find out where to go to ask — namely, the online and built-in help resources that Access offers.

Note: We went to the trouble of typing up a ton of records in a few sample databases that are designed to show you the tricks of the Access trade. You can find all the samples at `www.dummies.com/go/access2013fd`.

Icons Used in This Book

When something in this book is particularly valuable, we go out of our way to make sure that it stands out. We use these cool icons to mark text that (for one reason or another) *really* needs your attention. Here's a quick preview of the ones waiting for you in this book and what they mean.

Tips are incredibly helpful words of wisdom that promise to save you time, energy, and the embarrassment of being caught swearing out loud while you think you're alone. Whenever you see a tip, take a second to check it out.

Some things are too important to forget, so the Remember icon points them out. These items are critical steps in a process — points that you don't want to miss.

Sometimes we give in to the techno-geek lurking inside us and slip some technical babble into the book. The Technical Stuff icon protects you from obscure details by making them easy to avoid. On the other hand, you may find them interesting. (Your inner techno-geek will rejoice.)

The Warning icon says it all: *Skipping this information may be hazardous to your data's health.* Pay attention to these icons and follow their instructions to keep your databases happy and intact.

Where to Go from Here

Now nothing's left to hold you back from the thrills, chills, and power of Access. Hold on tight to your copy of *Access 2013 For Dummies* and leap into Access. Not sure where to start? See if you spot yourself in these options:

- ✔ If you're brand new to the program and don't know which way to turn, start with the general overview in Chapter 1.

- ✔ If you're about to design a database, we salute you — and recommend flipping through Chapter 4 for some helpful design and development tips.

- ✔ Looking for something specific? Try the Table of Contents or the index.

Occasionally, there are updates to technology books. If this book has technical updates, they will be posted at:

```
www.dummies.com/go/access2013fd
```

Now, go ye forth and build a database!

Part I

getting started
with
Access
2013

In this part . . .

- ✔ Discover what Access is and does and what's new in Access 2013.
- ✔ Learn about the objects that make up an effective database, and get started building your first table.
- ✔ Master database lingo so you can speak the language and understand the terminology.
- ✔ Visit `www.dummies.com` for great Dummies content online.

Chapter 1

Access 2013 Basic Training

*A*ccess 2013, the most recent version of the Microsoft Office database application, continues to be a very powerful program. You probably already know that, and perhaps that power — or your perceptions of all that Access can do — is what made you reach for this book. We congratulate you on your wise choice!

For all of its power, Access is also very — pardon the expression — *accessible*. It's pretty easy to use at the edges, where a new user will be; you don't have to venture all the way in to its core to get quite a lot out of the software. In fact, with just the basic functionality that you'll discover in this book, you'll be able to put Access through many of its most important paces, yet you'll be working with wizards and other onscreen tools that keep you at a comfortable arm's distance from the software's inner workings, the things that programmers and serious developers play with. There. Don't you feel better now?

You don't have to use every feature and tool and push the edges of the Access envelope. In fact, you can use very little of everything Access has to offer and still create quite a significant solution to your needs for storing and accessing data — all because Access can really "do it all" — enabling you to set up a database quickly, build records into that database, and then use that data in several useful ways. Later on, who knows? You may become an Access guru.

In this chapter, you'll discover what Access does best (and when you might want to use another tool instead), and you'll get a look at what's new and improved in Access 2013 (compared to Access 2010). You'll see how it does what it does, and hopefully you'll begin to understand and absorb some basic terminology.

Now, don't panic; nobody's expecting you to memorize tons of complex vocabulary or anything scary like that. The goal here (and in the next two chapters) with regard to terms is to introduce you to some basic words and general concepts intended to help you make better use of Access — as well as better understand later chapters in this book, if you choose to follow us all the way to its stunning, life-altering conclusion.

What Is Access Good For, Anyway?

What *is* Access good for? That's a good question. Well, the list of what you can do with it is a lot longer than the list of what you *can't* do with it — of course, especially if you leave things like "wash your car" and "put away the dishes" off the "can't do" list. When it comes to data organization, storage, and retrieval, Access is at the head of the class.

Building big databases

Okay, what do I mean by *big* database? Any database with a lot of records — and by *a lot,* I mean hundreds. At least. And certainly if you have *thousands* of records, you need a tool like Access to manage them. Although you can use Microsoft Excel to store lists of records, it limits how many you can store (no more than the number of rows in a single worksheet). In addition, you can't use Excel to set up anything beyond a simple list that can be sorted and filtered. So anything with a lot of records and complex data is best done in Access.

Some reasons why Access handles big databases well:

- ✔ Typically, a big database has big data-entry needs. Access offers not only forms but also features that can create a quick form through which someone can enter all those records. This can make data entry easier and faster and can reduce the margin of error significantly. (Check out Chapter 7 for more about building forms.)

- ✔ When you have lots and lots of records, you also have lots of opportunities for errors to creep — duplicate records, records with misspellings, records with missing information — and that's just for openers. So you need an application such as Access to ferret out those errors and fix them. (Chapter 9 lays out how you can use Access to find and replace errors and search for duplicate entries.)

- ✔ Big databases mean big needs for accurate, insightful reporting. Access has powerful reporting tools you can use to create printed and onscreen reports — and those can include as few or as many pieces of your data as you need, drawn from more than one table if need be. You can tailor