Access™ 2007 Forms & Reports

FOR

DUMMIES®

by Brian Underdahl and Darlene Underdahl

Authors of *iPAQ For Dummies*

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About the Authors

Brian Underdahl is the well-known, bestselling author of over 70 computer books on a broad range of subjects. He has appeared on a number of TV shows, including the *Computer Chronicles,* and several *TechTV* programs, and is the subject of an hour-long interview on the syndicated *Computer Outlook* radio program. One of his titles was recently recommended to viewers by Scott Gurvey, Bureau Chief, on the *Nightly Business Report* on PBS, and his books have won awards including an Award of Merit from the Northern California Technical Communications Competition and the Referenceware Excellence Award for best title in the Graphic Design and Multimedia category.

Brian has been involved in personal computers from their beginning and has a background in electrical engineering. His last "real" job was as a Senior Programmer/Analyst for a large company, where he worked hard to bring the power and freedom of PCs to the desktops.

Brian figures that it's the author who should do the work so that readers can get their money's worth. That's why his books are different — he takes the time to explain what's going on so that readers can understand the subjects easily.

Darlene Underdahl spent many years as a Quality Assurance expert. She is applying that "attention to detail" in the writing she does today. In addition to technical writing, she has written a memoir of her early years and is gathering notes for future projects. She works and lives with her husband, the bestselling author Brian Underdahl, in the mountains above Reno, Nevada.

Dedication

Darlene: For Brian . . .

Author's Acknowledgments

No book is the product of one person, even if one person has the title of author and gets to have his or her name on the cover. I'm very lucky to have a lot of people I can thank for all the hard work and effort they put into this book. They include Kyle Looper and Pat O'Brien.

I'd also like to thank the many people who provided me with the wonderful Access tools and add-ons so that I could give you an idea about how you can get even more from Access. Please do check out the Web sites I list for these great products — you owe it to yourself to see how much more productive you can be.

We can't work without a functioning computer, so special thanks go out to Allison Wagda at ZoneLabs for providing ZoneAlarm Internet Security Suite. I sleep a lot better at night knowing that I don't have to worry about viruses and spyware, and I hope all my readers realize the importance of this type of protection.

Finally, many thanks to Fred Holabird of Holabird Americana, `www.holabird americana.com`, for allowing me to use samples from the Holabird Americana databases in order to be able to show some real-world examples in this book. Fred is a good friend and I'll always be grateful for his help!

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Introduction

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*M*icrosoft Access 2007 can be an incredibly useful application, but it can also be very frustrating if you don't know how to make it do what you want it to do. In a perfect world, you'd have a guru around, 24/7 — someone who knows Access 2007 inside and out and is willing to guide you along the way, showing you handy little tricks and useful techniques that help you get the results you need.

Well, I may not be there with you, but this book is the next best thing. I've gathered the really useful pieces of information that you need to create powerful queries, very easy-to-use forms, and reports that actually tell the story of what is going on inside your data. Along the way, I make sure to show you the special tricks and techniques that I use.

About This Book

Access 2007 Forms & Reports For Dummies is a hands-on guide that uses real-world examples to show you just what you need to know about Access and why you need to know it. You won't find a bunch of buzzwords and jargon. Rather, you do find the solid information you really need and can't find elsewhere about creating queries, forms, and reports. Yes, I do give you good, solid information about queries in addition to forms and reports because queries are an essential element that will help you create better forms and reports.

Access 2007 Forms & Reports For Dummies is also a reference that you can use as you like. If you have a specific problem you need to solve right now, you can jump directly to the related topic and skip around as much as you want. But if you really want to make Access work for you, I suggest that you read through the entire book because you will discover many things you don't already know.

Finally, *Access 2007 Forms & Reports For Dummies* is specifically for users of Access 2007. Although the basics of queries, forms, and reports haven't changed much from the earlier versions of Access, there are enough important changes in Access 2007 so you'll find this book very useful even if you've used previous versions of Access.

Conventions Used in This Book

We've used a few conventions in this book to make it easier for you to spot special information. Here are those conventions:

✏ New terms are identified by using *italic*.

✏ Web sites addresses (URLs) are designated by using a `monospace` font.

✏ Any command you enter at a command prompt is shown in bold and usually set on a separate line. Setoff text in italic represents a placeholder.

✏ Command arrows, which are typeset as ⇨, are used in a list of menus and options. For example, Tools⇨Options means to choose the Tools menu and then choose the Options command.

✏ Key combinations are shown with a plus sign, such as Ctrl+F2. This means you should hold down the Ctrl key while you press the F2 key.

✏ All Access properties and fields are set apart in `monospace` font, as well, like this: Use the `Input Mask` property of the Data tab to create an input mask.

✏ Wherever I instruct you to use a snippet of code, I set it apart like this:

```
INSERT INTO LIVEWINBID
SELECT [Auction 67].*
FROM [Auction 67];
```

What You Don't Have to Read

I always have a hard time telling people that they don't have to read certain parts of a book if they don't care to. You can find some really useful information hidden away in things like the text next to Technical Stuff icons, but I understand if you feel that there isn't room in your brain for one more bit of technical information. Maybe the best thing that I can recommend is that if you don't want to read the whole book now, start by reading what looks the most interesting and then, after you've discovered how much really cool stuff I include, go back and have a look at what you missed the first time. You'll be glad you did!

Icons Used in This Book

Access 2007 Forms & Reports For Dummies includes icons that point out special information. Here are the icons I use and what they mean:

This icon makes you seem like a real Access expert in no time. It highlights special tricks and shortcuts that make using Access even easier. Don't miss any of these!

This icon reminds you of important information that can be far too easy to forget and that can cause a lot of frustration when you do forget.

Be careful when you see this icon. It points out an area where you'll want to be extra cautious so that you don't cause yourself problems. It also tells you how to avoid the problems.

Technical Stuff is information for folks who want to know all the geeky details.

Real World Examples tell you about actual ways to apply your new Access techniques. Don't miss any of these because they're sure to give you a lot of ideas you can adapt and use.

Foolish Assumptions

Making assumptions is always a gamble because assumptions can quickly come back to haunt you. That said, in writing this book I made some assumptions about you. This book is for you if:

✔ You have Access 2007 and want to know how to use it more effectively.

✔ You don't yet have Access 2007, but are wondering if getting Access 2007 can help you organize all of that data you're currently trying to manipulate with Excel or some other spreadsheet.

✔ You have a bunch of data that you want to turn into useful information.

✔ You want to see how you can create more efficient Access reports and quit wasting so many trees.

✔ You would like to know how to use data from an external database without having to get down on your knees to beg permission every time you need to run a report.

✔ You have finally realized that you are a *5th Wave* cartoon addict and simply can't pass up the chance to see what is hidden in these pages.

How This Book Is Organized

Access Forms & Reports For Dummies has six parts. Each part is self-contained, but all the content is somewhat interconnected. That way you'll see the most useful information without a lot of boring repetition.

Part I: Accessing Both Ends: Getting Data In and Info Out

This part shows you the basics of queries, forms, and reports. You see how these pieces fit together, and I make sure that you have the fundamentals down pat so that you have a good foundation for the rest of the topics.

Part II: Creating Effective Queries

Queries enable you to work with sets of data instead of simply dumping everything into the pot. This part shows you how to create effective queries that enable you to pick and choose what shows up in your forms and reports. You even see how you can step beyond simple queries by having a look underneath the fancy face that Access throws onto your queries.

Part III: Building Really Useful Forms

Forms make data entry and editing into a much easier task. This part shows you how to create forms that really are useful, and it tells you how to create forms that tackle data from more than one table at a time — for even greater efficiency.

Part IV: Designing Great Reports

With Access reports you can turn data into useful information. This part shows you how to create great reports that look good and that provide a wealth of understandable information.

Part V: Way Cool Advanced Queries, Forms, and Reports

Ordinary techniques are for ordinary people. This part takes you well beyond the ordinary and shows you how to get so much more from your queries, forms, and reports. This part also shows you some great tools you can use to make Access into an even more powerful partner for your database needs.

Part VI: The Part of Tens

This part tells you about some places on the Web where you can find even more information about Access. It concludes with some vital tips to remember as you work with Access.

Part I

Accessing Both Ends: Getting Data In and Info Out

The 5th Wave   By Rich Tennant

"Ms. Lamont, how long have you been sending out bills listing charges for 'Freight', 'Handling', and 'Sales Tax', as 'This', 'That', and 'The Other Thing'?"

In this part . . .

You need a good foundation if you're going to build anything useful and long lasting. In this part, I make sure that you have a good foundation for the topics in the rest of the book. Here you discover the basics of queries, forms, and reports that you really need but that you may have missed up until now.

Chapter 1

Getting to Know Forms and Reports

*W*ithout forms and reports, an Access database is just a jumble of hard-to-use information. But with really good forms and reports, that same database becomes both informative and a joy to use. Well-designed forms and reports make your Access databases into something that's far beyond the ordinary in utility, ease of use, and flexibility.

If you've been playing around with Access for a while, you have probably at least tried to create some forms and reports. Maybe some of your efforts didn't seem too bad, but you've probably had your share of frustration, too. Creating forms and reports that really do what you want them to do can be an awfully exasperating experience.

In this chapter, I show you a number of interesting things about forms, reports, and their sidekick queries so that you can see what each of them can do and why they're all important. You see how queries can greatly enhance the capabilities of forms and reports. I finish up the chapter by very briefly mentioning some really cool tools (find out even more about them in Chapter 20).

Finding Forms Fascinating

In order to understand the importance of forms in an Access database, begin by looking at the alternative. Figure 1-1 shows the *Datasheet* view of a typical

Access table. (A *table* is the structure in which Access stores information in your database.) The Datasheet view looks an awful lot like an Excel work-sheet. You are likely pretty familiar with this view of a database because it seems as though almost everyone's first attempt at a database is to just create a list in a spreadsheet. Welcome to the "if the only tool you have is a hammer, everything looks like a nail" club!

Each field is in a column

Records appear in rows

Figure 1-1:
The Access Datasheet view of the information in a table looks like an Excel spreadsheet.

Record navigation tools
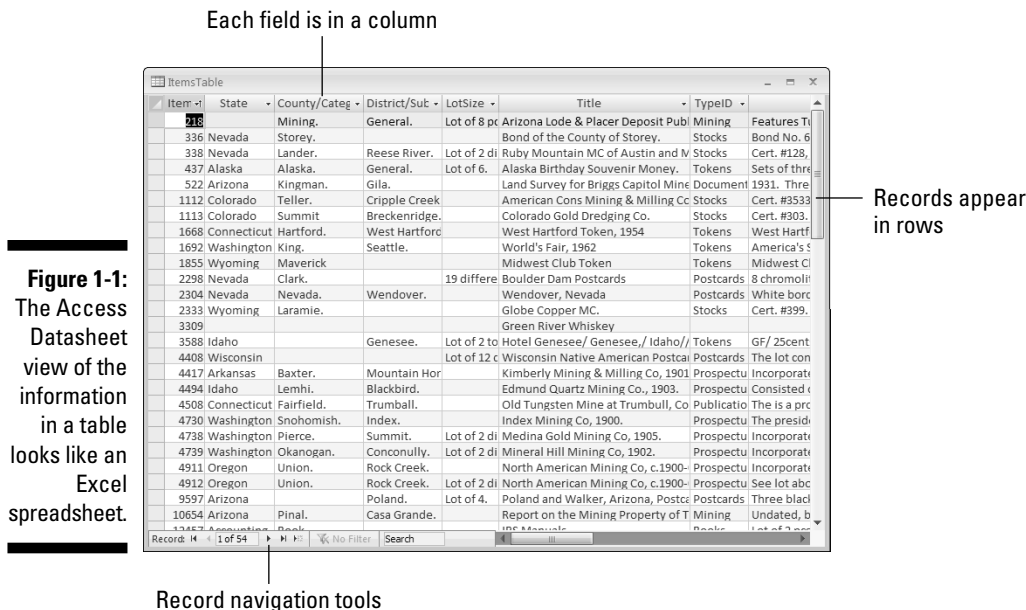
In Datasheet view, each record is displayed in a single row, with columns for each of the database fields. Even though this view of the data is probably pretty familiar, it isn't very convenient. For one thing, unless you're keeping track of only a little information about each item, it's really hard to see an entire record in Datasheet view because everything has to fit into one row. That means you have to scroll back and forth to see all of the fields. Depending on the length of each field, sometimes you can't even see the entire contents of a single field on-screen. And don't even think about seeing a single record wrap around and take up multiple rows — making everything fit on-screen simply is not an option.

Of course, some other factors make the Datasheet view pretty inconvenient for most purposes. Can you imagine how little fun it would be to scroll through screen after screen trying to find a specific record in Datasheet view? Now imagine that instead of finding a single record, you want to find a dozen or so related records in a table containing 10,000 or more records. It's almost enough to make you want to move to a desert island where there aren't any computers, isn't it?

Fortunately, there's a good solution at hand in the guise of *forms.* Access forms provide a much more convenient way for you to interact with your database. Learning to create great forms is certainly going to be a lot easier than packing up your stuff for that move to a desert island. The following sections give you a look at some of the ways forms can help you.

Streamlining data input with forms

No database has much value until it contains information. You wouldn't be able to get any useful data from an empty database, so a very important task in creating a database is inputting your data. Sure, you might have some existing data that you can import, but even that data required input at some point.

Entering data into a table in Datasheet view really isn't much fun. You first have to open the table and then locate the record where you want to enter your data. Maybe you're adding to an existing record, or perhaps you're adding a new record right after the last existing one in the datasheet. When you've selected the correct record, you have to move the insertion point to each field in turn and type in the information. It's easy to accidentally start typing into the wrong field — especially if the table layout doesn't quite match the layout of the information you're entering (and how often do you see data on paper that doesn't match the layout of the table?).

Forms can make inputting data much easier in several ways:

- ✔ **Forms typically have labels that make seeing exactly which field you're filling in far easier.**

- ✔ **Forms can have drop-down lists so that you simply choose the proper information from the list without worrying about mistyping the data.**

- ✔ **Forms are usually laid out with plenty of room to see all the fields in a record.** That makes keeping track of which record you're entering a much easier task.

- ✔ **You can easily create forms for special purposes, such as entering data in specific sets of fields.** In this case, the form might not need to include all of the fields; when you use only what you need, you end up with a simpler, less confusing form.

- ✔ **Forms don't have to be laid out using the same field order as the table.** This is an especially handy feature if you're inputting data that is laid out quite differently than your table.

- ✔ **You can set up forms to validate the data so that users can't mess up your database by entering bogus information.**

Even if some of these form features seem a little bit beyond your interests or immediate needs right now, don't worry — you'll find out about all of them and get many more great ideas in the chapters that follow.

Entering data with the Form Wizard

Using a form to enter data into an Access database is much easier than entering data directly into a table in Datasheet view. Figure 1-2 shows a simple form you might create with the Form Wizard in Access. In this case, the form is not optimized in any way — it appears the way the wizard created it.
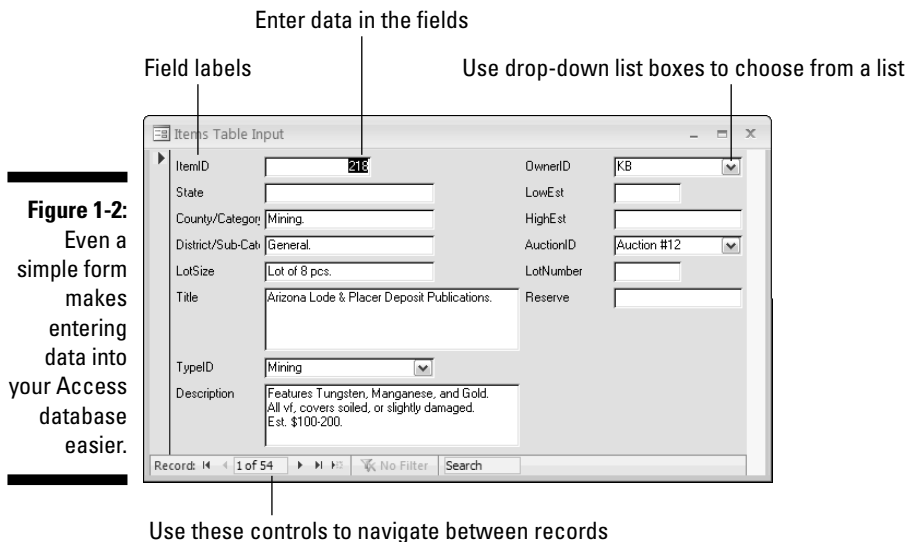
Enter data in the fields

Field labels   Use drop-down list boxes to choose from a list

Figure 1-2:
Even a
simple form
makes
entering
data into
your Access
database
easier.

Use these controls to navigate between records

If you compare the form shown in Figure 1-2 with the Datasheet view shown in Figure 1-1, you can see pretty easily how much more convenient the form is for entering data. Each of the fields is clearly labeled (even if the Form Wizard didn't quite figure out the proper size for a couple of the labels). Here are a couple of ways that the Form Wizard makes entering data easier:

✔ **Easy movement between fields:** You can move between the fields by clicking the field you want or by pressing the Tab key. Because the fields are labeled, you can easily move to specific fields, skipping the fields you don't want to use for now.

✔ **Easy movement between records:** You can use the navigation controls at the bottom of the form to navigate between records. This feature is just like the navigation controls you commonly use, but with a notable exception: In forms, pressing Page Down moves you to the next record, and Page Up moves you to the previous record. In Datasheet view, Page Down and Page Up move you to a new screen page of records. (The number of records you jump depends on how many records are visible on the screen, and this can change depending on how you display the datasheet window. Don't you just love the inconsistency?)