GET THE SCOOP ON...
The Access 2007 environment ▪ Getting started with
Access 2007 ▪ Templates ▪ Building a database from a
template ▪ Building a database from scratch

Getting In and Out

Microsoft Access 2003 has undergone a complete makeover. It has a new name, Microsoft Office Access 2007 to complement its new look and feel. The most noticeable change is that Ribbons now replace menus. Under the hood is the power to manage any data that you can throw at it.

Before you learn how to harness this power to create database applications that the pros in IT will envy, take a moment for a look-see — kick the tires and take Access 2007 for a spin.

Access 2007 is new, so don't skip this chapter even if you currently use a previous version of Microsoft Access; otherwise you'll be lost and miss out on many time-saving new features.

Starting Access 2007

Starting Access 2007 is the same as starting other programs. Click the Windows Start button, then All Programs, and find the Microsoft Office entry. Access 2007 is listed among the other products that comprise Microsoft Office.

A faster, more efficient way to start the program is to add the Access 2007 icon to your desktop, so you need only to double-click the icon to open Access 2007, or place Access 2007 on the Quick Launch toolbar.

Start from the desktop

Some programs automatically place an icon on the desktop for you when you install the program, whether or not you want to launch the program from your desktop.

To place Access 2007 on your desktop, follow these steps:

1. Create a shortcut in the Microsoft Office section of the All Programs window.

2. Highlight the Microsoft Office Access 2007 entry and right-click the mouse button.

3. Click the Create Shortcut entry on the pop-up menu, and another entry of Microsoft Office Access 2007 appears in the Microsoft Office section. A 2 next to the name indicates that this is a shortcut entry.

4. Drag and drop it to your desktop.

To remove Access 2007 from your desktop, right-click the icon and select Delete. Although the icon is gone from the desktop, the entry is still in the Microsoft Office section of the All Programs window.

Start from the Quick Launch toolbar

The Quick Launch toolbar (see Figure 1.1) is to the right of the Start button and is a great time-saver when you have multiple programs open at the same time that obscure the desktop. Simply kick off Access 2007 from the Quick Launch toolbar instead of digging through open screens to find Access 2007 on your desktop.

To place Access 2007 on the Quick Launch toolbar:

1. Create a shortcut for Access 2007 (see "Start from the desktop").

2. Drag and drop the shortcut onto the Quick Launch toolbar.

You can remove Access 2007 from the Quick Launch toolbar by right-clicking the icon on the Quick Launch toolbar and then clicking Delete.

Inside Scoop

Can't see the Quick Launch toolbar? Right-click the taskbar and then click Quick Launch from the Toolbars menu item.

Office Access 2007

Figure 1.1. The Quick Launch toolbar on my taskbar.

The Access 2007 environment

You'll find a lot of unfamiliar terms and objects in the Access 2007 landscape if you're new to Microsoft Access. If you currently use Microsoft Access, you notice that the new landscape is much different than previous versions.

The first thing you notice is that there are no menus or toolbars. These items are a thing of the past and are replaced by tabs that contain many features that use to be found on menus. This is a good thing because many time-saving features were overlooked, buried beneath layers of menus.

The Ribbon

The Ribbon (see Figure 1.2) is the area on top of the program window where you choose commands. Commands are grouped in a logical way.

Related commands are grouped into a tab. For example, you'll find all commands needed to design a page layout in the Page Layout tab.

Many tabs are hidden until you need them to work on a task. These are called contextual tabs. So you won't see the Page Layout command tab if you are not designing a page layout.
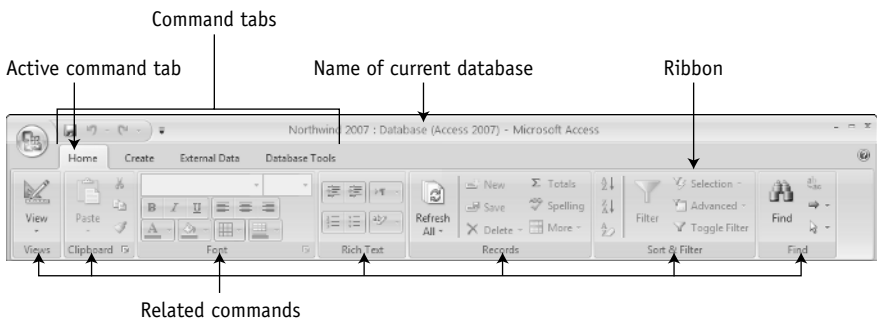

Figure 1.2. The Ribbon contains tabs that group together related commands.

Inside Scoop

You might find that the Ribbon takes up too much screen space. You can minimize a Ribbon by double-clicking the name of a tab on the Ribbon. Double-click the tab name again to maximize the Ribbon.

Galleries

A gallery (see Figure 1.3) is a control that shows what the command can do and the results of using the command. For example, the Margin gallery control displays options for standard margins, such as Normal, Narrow, and Wide. Each option displays measurements for the top, bottom, right, and left margins and shows a thumbnail image of the margin.
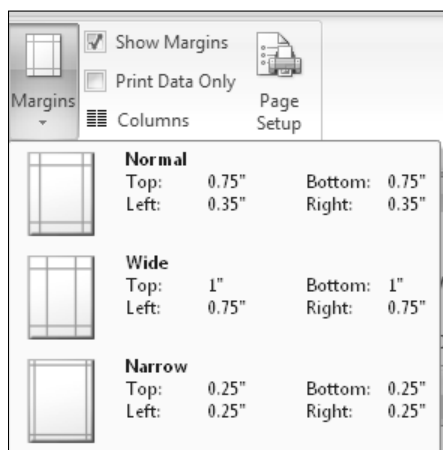

Figure 1.3. A gallery control for setting margins.

Quick Access toolbar

Some commands need to be handy. You find these commands on the Quick Access toolbar (see Figure 1.4) in the upper-left corner of the window next to the Office Button.

Save, Print, and Undo are the default commands on the Quick Access toolbar. They appear as small icons. Simply click the icon to use the command.
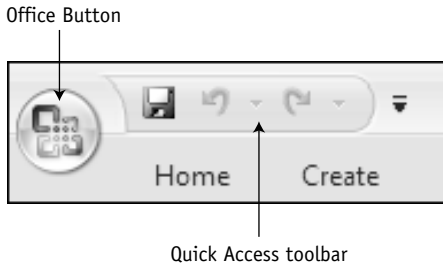
Office Button

Quick Access toolbar

Figure 1.4. The Quick Access toolbar contains the most frequently used commands.

Customizing the Quick Access toolbar

Microsoft's engineers knew that you and I want to add commands we use all the time to the Quick Access toolbar, so they gave us a way to do it. Follow these steps:

1. Right-click the Quick Access toolbar.

2. Click Customize Quick Action Toolbar from the pop-up menu.

3. Select Choose from drop-down list box (see Figure 1.5).

4. Pick the tab containing the command that you want to drop onto the Quick Access toolbar.

The Popular commands are displayed by default.

To add a command to the Quick Access toolbar, do the following:

1. Highlight the command in the left column.

**2.** Click the Add button, and the command pops onto the Quick Access toolbar.

To remove a command from the Quick Access toolbar, follow these steps:

1. Highlight the command in the right column.

2. Click the Remove button and the command pops off the Quick Access toolbar.

3. Click OK to activate your selection.

Inside Scoop

Change the order that commands appear on the Quick Access toolbar by highlighting the command in the right column of the Access Options window and then clicking the up and down position buttons.
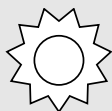
Bright Idea

If the Quick Access toolbar becomes too cluttered with commands, then move the Quick Access toolbar below the Ribbon. To do this, click the Customize Quick Access toolbar and select the Show Quick Access Toolbar Below the Ribbon.
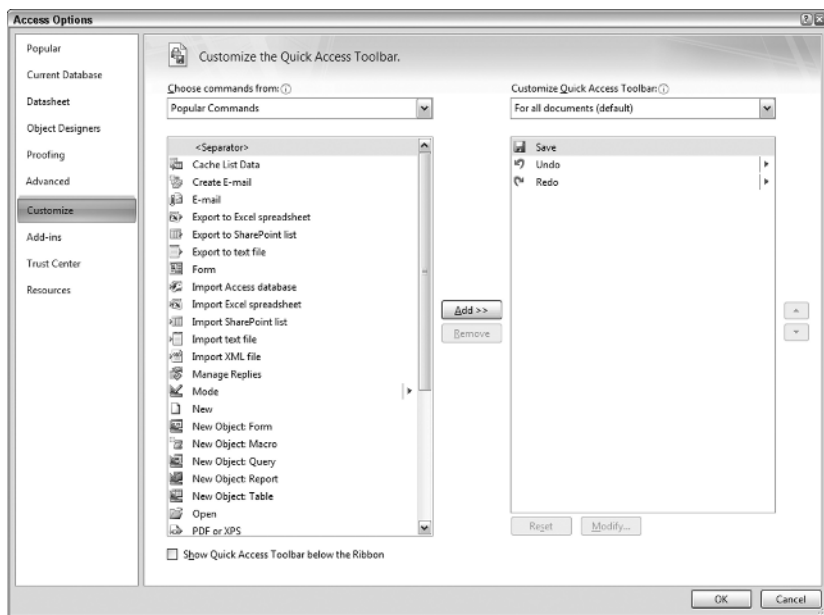

Figure 1.5. The left column contains command that can be added to the Quick Access toolbar.

The Office Button

The Microsoft Office logo (see Figure 1.6) in the upper-left corner of the window is more than a pretty picture, it is a button. Click it and you'll find useful commands to help manage the objects of your database and set options for Access 2007.

You use the Office Button to create new objects, open existing objects, and save current objects. Think of an object as a component of a database.

Access options are settings that let you customize how Office Access 2007 works. Options include choosing the default folder for your database, default file format for the database, database sort order, personalizing your copy of Access 2007, and setting the appearance of parts of Access 2007.
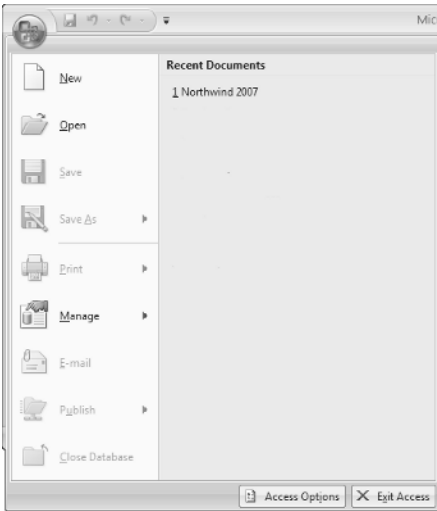
Figure 1.6. The Office Button displays commands that help you manage Office Access 2007.

Getting Started with Access

When Access 2007 starts, you see the Getting Started with Microsoft Office Access screen first (see Figure 1.7). From here, you can create a new blank database or open an existing database. The screen is divided into three panes:

■ The left pane contains categories of templates for creating different kinds of databases. Click a category to see a list of templates that appears in the center pane and then click the template you want to use for your database.

■ The center pane also contains an icon for creating a new blank database. Click this to create a database from scratch.

■ The right pane lists the most recent databases that you've used. Click the database name to open it. And if you can't find your database listed, then click More to display the Open window where you can pick the database from your disk drive as you do with other Windows programs.
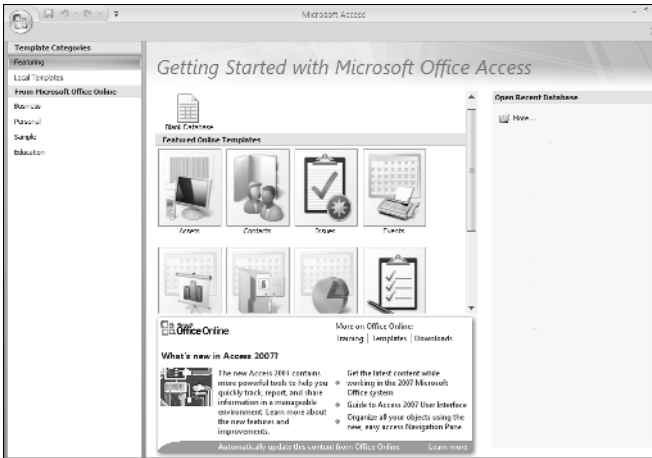
Figure 1.7. The left pane contains template categories. The center pane lists templates in the selected category. The right pane lists recently opened databases.

Using templates

Rather than creating a database from scratch, you can use one of several database templates that come with Office Access 2007 or download others from Microsoft Office Online.

A *template* is a prebuilt database that you can use to manage data for a particular type of business operation, such as managing customers and tracking expenses. It contains all elements of a database that you need — except the data.

When you select a template, Access 2007 automatically builds tables, queries, forms, reports, and other components that you would have to build yourself. All you need to do is enter data.

Using a template is the best way to build a database for a business operation. Even if your business operation isn't quite the same as the one that the template designer had in mind, you can easily create, remove, or modify any part of the database to meet your requirements.

Watch Out!
You already have a version of the Northwind database installed if you are running a previous version of Access. It is best to use the Northwind version that comes with Access 2007, otherwise the older version might have to be converted to be used by Access 2007. Although this is done automatically when you open it, errors can result.

> **Inside Scoop**
>
> Make sure that you're connected to the Internet before clicking any of the subcategories under From Microsoft Office Online, otherwise Access 2007 won't be able to access the Microsoft Web site.

Template Categories

Template Categories lists two subcategories of templates (unless you've added more) available to use in Access 2007. These subcategories are:

- **Featuring.** This subcategory is the default, and it lists the Customer Service Database and Marketing Projects Database in the center pane.
- **Local Templates.** You can use eight templates for databases common to most users.

From Microsoft Office Online

The From Microsoft Office Online section of the left pane lists subcategories of templates that are available free of charge from Microsoft's Web site. Clicking a subcategory takes you to the section of the Microsoft Web site that has these templates. A list appears on the center pane.

Building a database from a template

You're probably anxious to put Access 2007 through its paces, so start building a database from a template. Then I can continue your tour of Access 2007. Follow these steps:

1. Under the Template Categories in the left pane, select Local Templates. Several templates for databases that were part of the installation are displayed in the center pane (see Figure 1.8).

2. Click the Assets template and then enter a filename for your database (see Figure 1.9). The default filename is Assets followed by a number.

> **Inside Scoop**
>
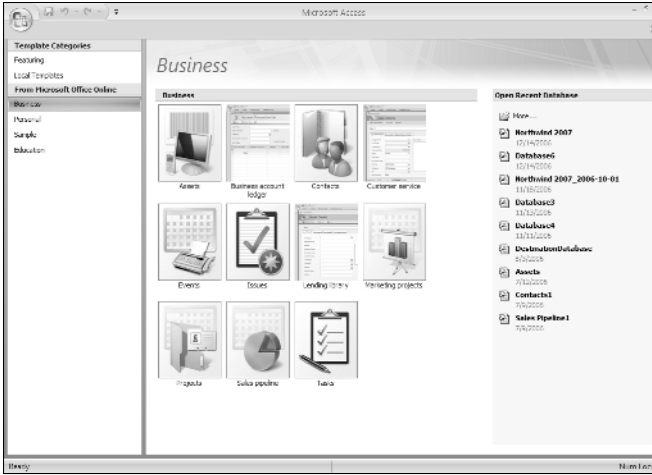> Microsoft validates your copy of Microsoft Office when downloading templates.

Figure 1.8. The center pane contains several Business templates.

3. Highlight the default filename and enter a new name.

By default, the database is created in my C:\Documents and Settings\Owner\My Documents folder. You might have a different default folder, but this is the one that appears in my copy of Access 2007.

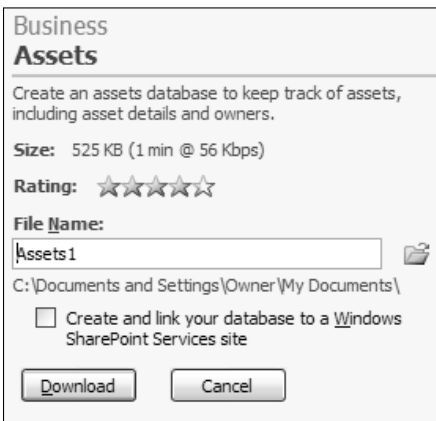**4.** Click the open folder icon and then enter the name of a different folder if you want to store your database in a folder other than the default folder.

Figure 1.9. Name the database.

5. Click Create and Access 2007 builds the database using the Assets template.

When the database is built, you see the Asset List form (see Figure 1.10), ready for you to enter information about your luxury car, your get-away hideaway on Maui, and your 145-foot yacht.

Click the Shutter Bar to open the Navigation Pane where you see all the components of the database, including tables, forms, reports, and charts. I show you how to use these and how to create your own through-out this book. For now feel free to double-click these components and see what happens.
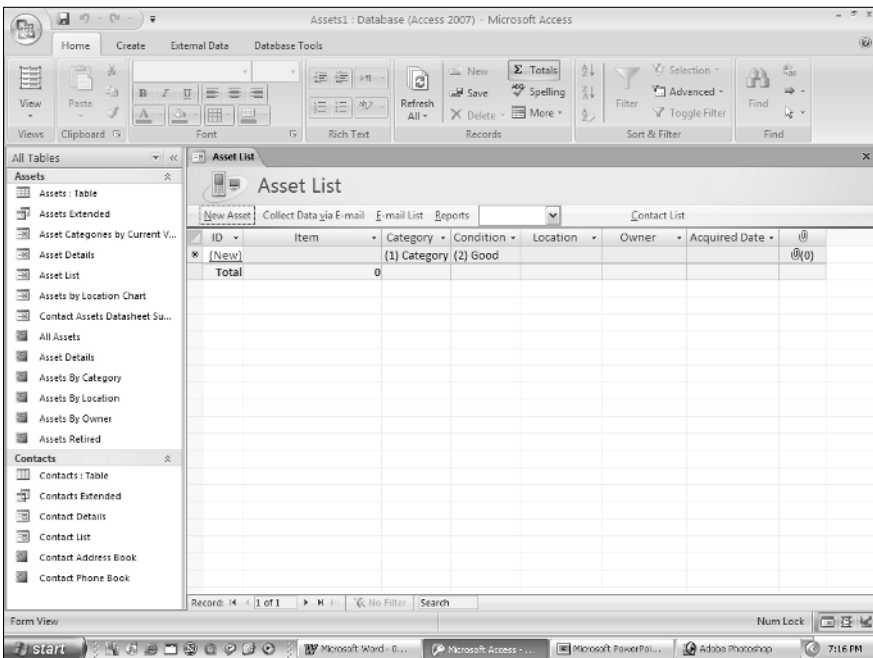

Figure 1.10. The Asset List is displayed once the database is created.

Return to the Getting Started with Microsoft Office Access screen.

Click the Office Button and then click Close Database (see Figure 1.11) to close the Assets database and return to the Getting Started with Microsoft Office Access screen.

> **Bright Idea**
>
> Press the Alt key once, and shortcut keys appear (see Figure 1.12). Press the shortcut key for the feature you want to use.
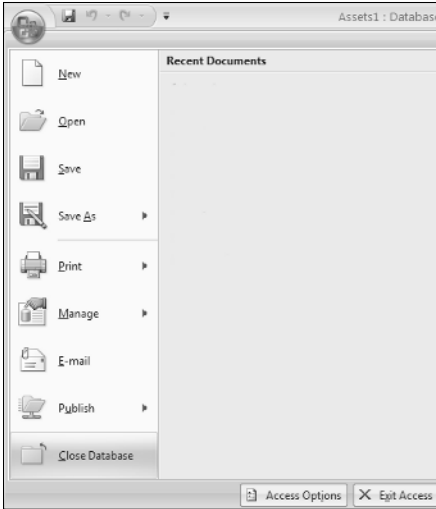

Figure 1.11. Close the Assets database.

Shortcut keys

Figure 1.12. Press Alt to see shortcut keys that you can use to access some of the Access 2007 features.

Building a database from scratch

Templates give you a leg up when building a database application, but you may find yourself spending a lot of time trying to locate a template that fits your needs. In this situation, building a database from scratch may be the better choice.

To build a blank database, follow these steps:

1. Click the Blank Database icon (see Figure 1.13) from the Getting Started with Microsoft Office Access screen that appears when you start Access 2007.

Inside Scoop

It is always best to overwrite the default filename with a name that describes the kind of information that will be stored in the database and change the default folder to a folder that you create for your database application.
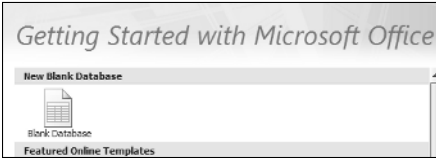

Getting Started with Microsoft Office

New Blank Database

Blank Database

Featured Online Templates

Figure 1.13. Create a new blank database.

2. Enter the filename for the database (see Figure 1.14).

Blank Database

Create a Microsoft Office Access database that does not contain any existing data or objects.

File Name:

Database1

C:\Documents and Settings\Owner\My Documents\
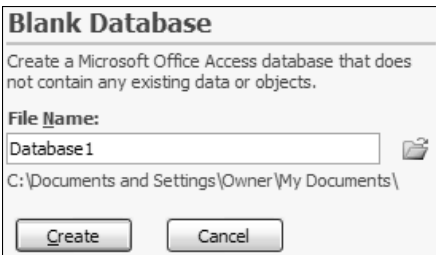
[Create]   [Cancel]

Figure 1.14. Enter a filename that describes the kind of information that will be stored in the database.

3. Click the folder icon to select a folder other than the default folder to store the database. You select the folder the same way as you do with other Windows applications.

4. Click the Create button to create the database. Access 2007 automatically creates a table for the database and opens, prompting you to add a new field.

In Chapter 4, you find out how to transform a blank database into a powerful Access 2007 database application.

Inside Scoop

Access 2007 creates a default filename using the word Database followed by a digit. The digit represents the next available number for the database.

Opening the Northwind 2007 database

Access 2007 has a complete database — including data — called the Northwind 2007 database that you use to see how a database works. You can use this database to explore Access 2007.
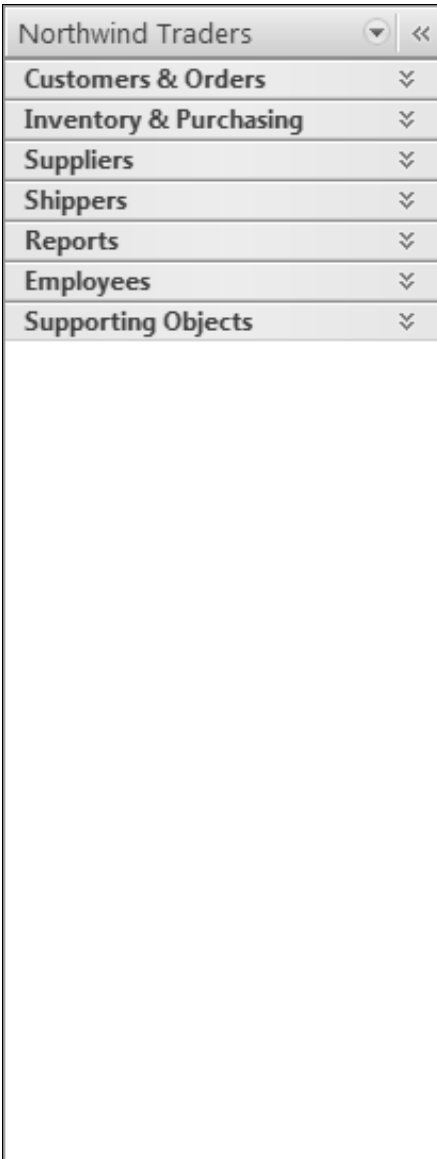
The Northwind 2007 database is in the form of a database template. You use this template to create the actual Northwind 2007 database. Here's how to use the Northwind 2007 template to create the Northwind 2007 database.

1. Click Local Templates under the Template Categories. The Northwind 2007 database icon appears in the center pane.

2. Click the icon and enter a filename for the database. (You also see this prompt when you create a database from a template.)

3. Click the Create button.

4. Close the Startup screen.

5. Click the Shutter Bar to open the Navigation Pane where you can see categories of objects (Reports, for example) for the database (see Figure 1.15).

6. Click the down arrow next to the category name to see the objects.

Working with form views

A form is used to display, enter, or modify information on the screen much like the screens that you use at your ATM machine or for a database application in your office.

In the following sections, I detail the three types of views you use when working with forms.

Northwind Traders	⊙	«
Customers & Orders		�≫
Inventory & Purchasing		�≫
Suppliers		�≫
Shippers		�≫
Reports		�≫
Employees		�≫
Supporting Objects		�≫

Figure 1.15. Categories of objects for the Northwind 2007 database.

Form view

People who use your Access 2007 database application typically see data in a form much like an order form you fill out when buying something online.

The form seen by users of your Access 2007 database application is called the Form view. To explore the Form view open the Customer List form and then do the following:

1. Click the down arrow alongside the Customers & Orders category to see all the objects in this category.

2. Double-click the Customer List form, and the Customer List form displays (see Figure 1.16). This is one way the person who uses the database application sees and interacts with information in the database.

The Customer List form displays customer information in columns and rows much like you see in a spreadsheet. Columns are referred to as fields, and rows are called records.

The terms *fields* and *records* might be new to you and a little confusing. We use Access 2007 to manage our information. Information is a collection of data. Data is a fact that has no meaning, such as a person's first name. A field (column of a spreadsheet) stores a piece of data — first name. A record stores information — all the data related to a particular customer. I tell you all you need to know about fields and records in the next chapter.

Vertical and horizontal scroll bars are automatically displayed whenever all the information cannot fit on the screen just like they are on most Windows applications.

At the bottom of the screen is a control bar used to move through the information. This too is standard on many Windows applications. It lists the number of the current record and the total number of records on the form. Click the control buttons to move through the form.

Place the cursor in each field on the form if you want to enter or modify data in the field. However, you are unable to change the form itself in the Form view.
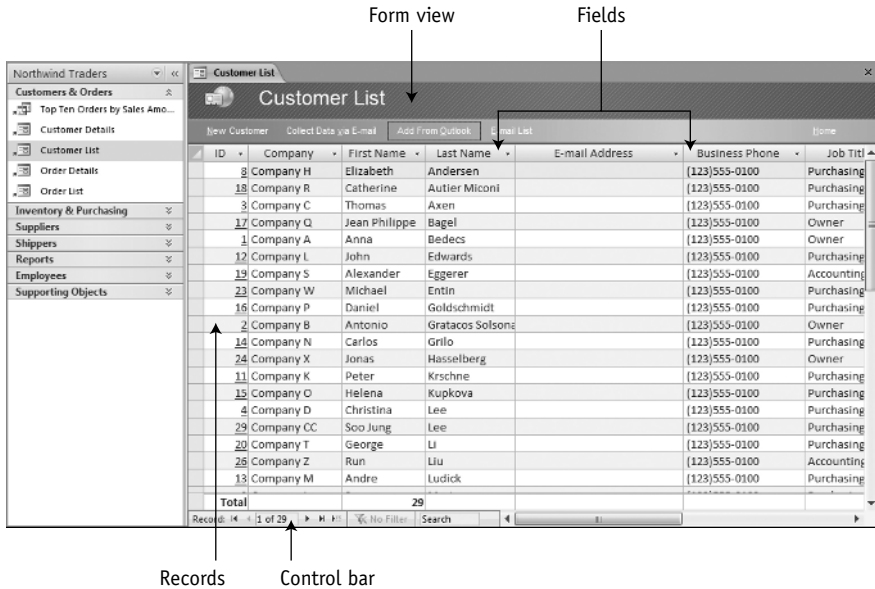
Form view   Fields

Records   Control bar

Figure 1.16. Here is the Customer List for containing information about customers.

Design view

The Design view is used to design a form by dragging and dropping images, fields, menus, and a whole bunch of other things onto the form that make your form useful and easy to use.

Right-click the Customer List tab and click Design view to see the pieces of the form.

The form is divided the following three sections:

■ **Form Header.** Contains objects that appear on all pages of the form.

■ **Detail.** Contains objects such as records that are the body of the form.

■ **Form Footer.** Contains objects that appear at the bottom of every page such as a page number. (See Figure 1.17.)

The Design tab contains tools you need to insert objects onto the form. I explain in Chapter 12 that these objects include radio buttons, combo boxes, list boxes, check boxes, and others that give your form intelligence.

1. Click an object on the Design tab and then click on the form to add the object to the form.

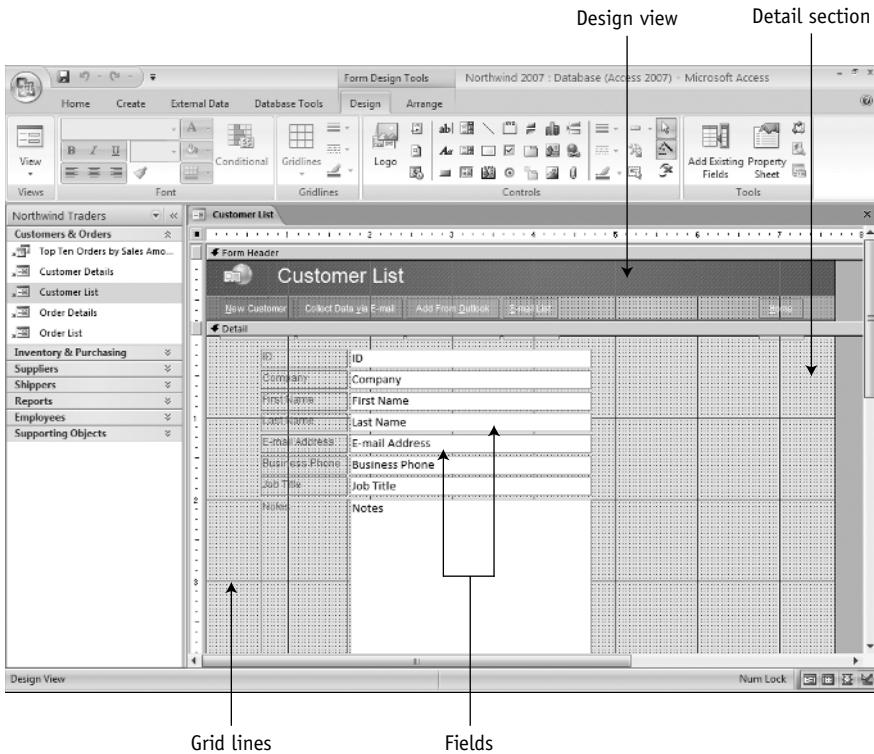2. Drag the object into position using grid lines as a guide for lining up objects.

Figure 1.17. The Design view is used to place objects on a form.

Layout view

The Layout view is a combination of the Form view and Design view — well almost. The Layout view contains information just like the Form view, plus you can add, edit, and remove database objects as you do in the Design view. However, the Layout view doesn't have form sections, the grid, and other helpful tools found in the Design view.

1. **Right-click the Customer List tab and click Layout view to display the same form in the Layout view (see Figure 1.18). At the top of the screen, you find two tabs.**

2. **Click the Format tab to see the tools to change the font, size, and all kinds of other things you expect to find when formatting a document.**

3. **Click the Arrange tab for tools that let you create nearly any layout you can imagine (see Figure 1.19).**
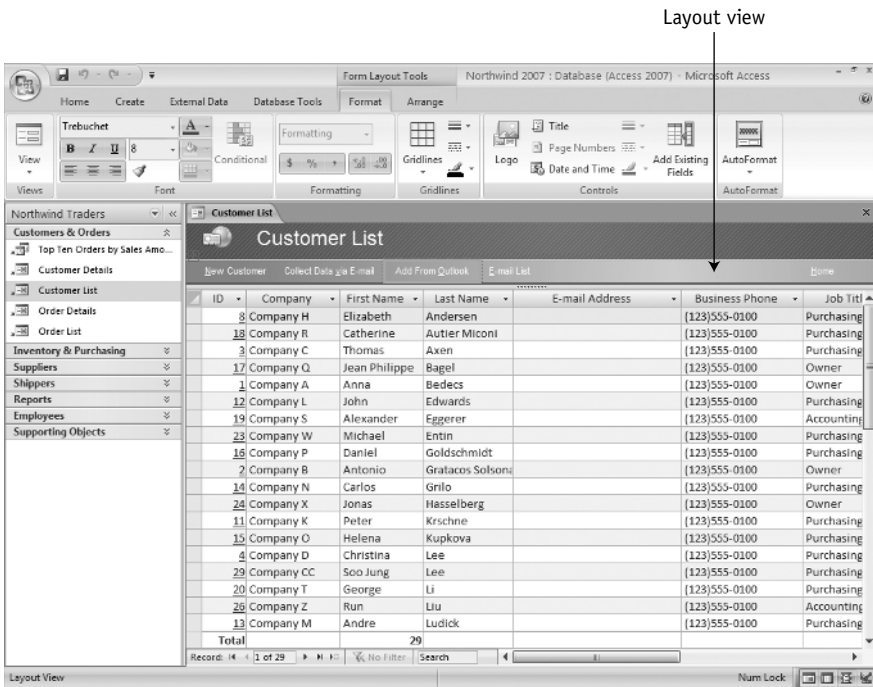
Layout view

Figure 1.18. The Layout view is an intuitive tool to use to build a form.
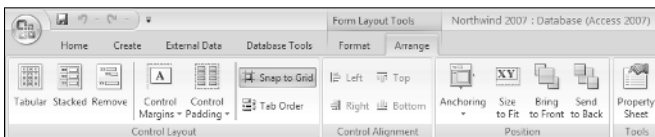

Figure 1.19. The Form Layout Tools tab contains all the tools you need to lay out a form.

Working with data views

Access 2007 has its own way to display information without you having to build a form. These are referred to as data views. Think of these as built-in forms. These data views are the Datasheet view, the Design view, PivotTable view, and PivotChart view.

Let's take a look at data views for the Northwind 2007 database.

1. Click the Supporting Objects category in the left pane to see all the supporting objects. A supporting object is part of the database that is not normally seen by the person who uses your database because he uses forms instead.

2. Double-click Sales Analysis (see Figure 1.20). You'll probably have to scroll the vertical scroll bar to find it.
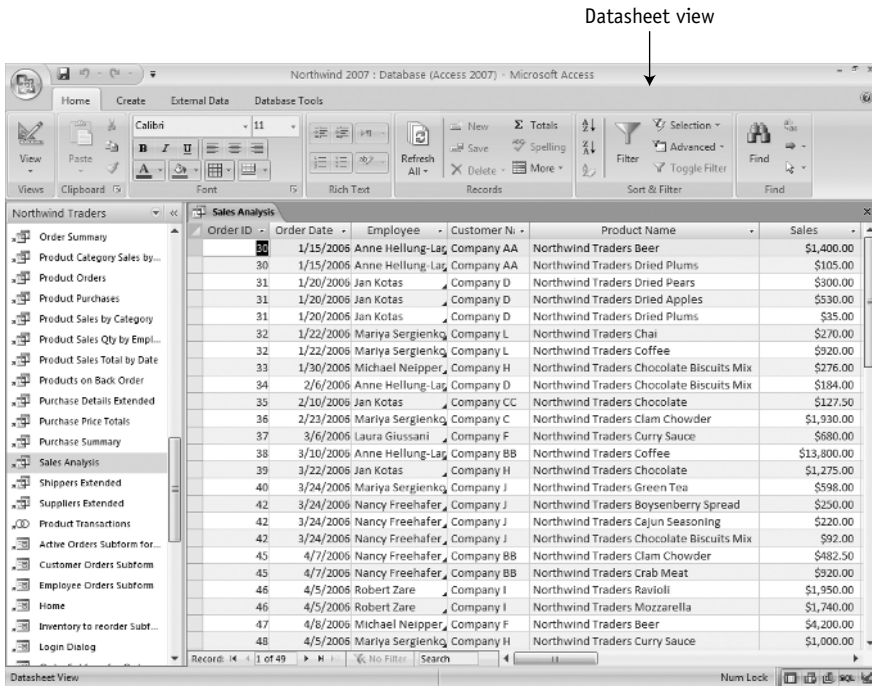
Datasheet view

Figure 1.20. The Datasheet view displays information similar to the way information is displayed in a spreadsheet.

Datasheet view

The Datasheet view is one that you use a lot when developing your Access 2007 database applications.

The Datasheet view has columns and rows similar to a spreadsheet. You use the Datasheet view to display, add, modify, and remove information.

Click the cursor in a field to change the value of the field just like you do in a spreadsheet.

Right-click the left-most column to display a pop-up menu where you can choose options to insert a new record, delete the record, and copy and paste the record.

Design view

The Design view is used to select the type of records that will appear in the Datasheet view. I go over this in Chapter 6. For now, open the Design view.

1. Right-click the Sales Analysis tab.

2. Click Design view from the pop-up menu to display the Design view (see Figure 1.21).

Wow! This looks very confusing, but it will be old hat to you by the time you finish reading this book. The diagram shows boxes connected together with lines. Each box is a table in the database. Inside the box are names of fields of that table.

At the bottom of the screen is the query tool. A query is a request you make to Access 2007 for information. The query tool is used to create the request. I'll show you how to do this in Chapter 8.

Many times we want to see information contained in two or more tables. In this example, we're seeing the Order ID and Order Date from the Orders table and the Customer Name from the Customer Extended table. We're also picking up information from other tables in the Northwind 2007 database. These are listed in the Field and Table rows of the query tool. Check marks tell Access 2007 that we want those fields to appear in the Datasheet view.

> **Hack**
>
> Access 2007 is a relational database management system (DBMS). Relational means to relate together information in two or more tables. Tables are joined together using a value that is common to a field in both tables.

The lines show the fields used to link together two tables. I'll stop here because I think you have an idea what's going on in the Design view. I'll go into the nitty-gritty of designing a Datasheet view throughout this book.
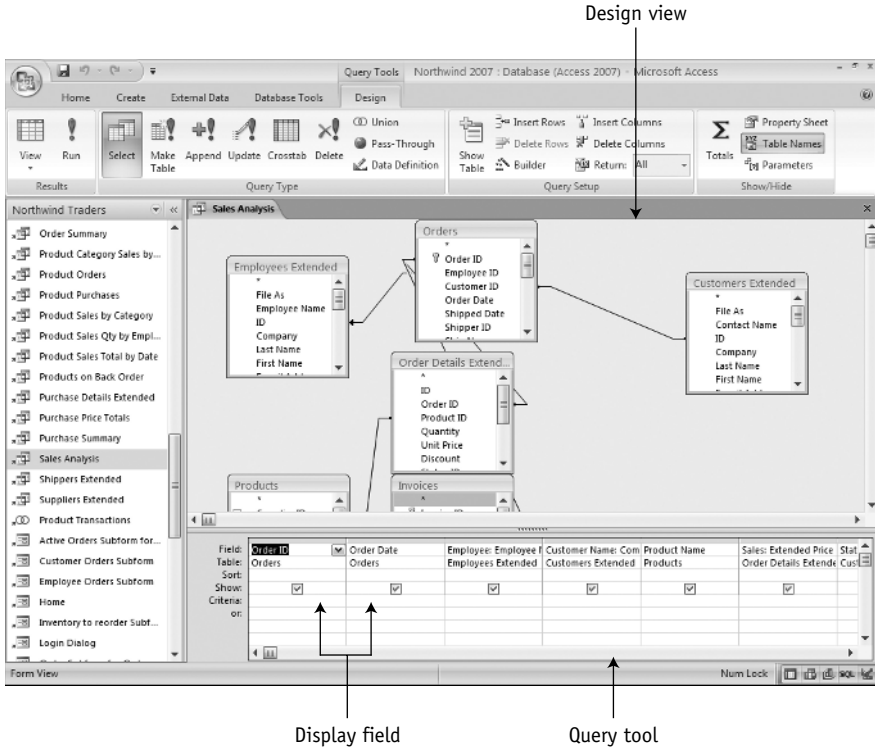

Figure 1.21. The Design view is used to select records for the Datasheet view.

PivotTable view and PivotChart view

PivotTable and PivotChart are no doubt something you don't hear spoken about every day. They are used to arrange data in a way that makes it easy to perform data analysis interactively.

The PivotTable view is used to arrange data and the PivotChart view is used to create a graphic representation of the data in the PivotTable.

As information changes in the database, corresponding changes are made to the PivotTable and PivotChart enabling you to immediately see the impact of the change on your analysis.

You'll learn how to create and use PivotTables and PivotCharts in Chapter 11.

Working with report views

A report is used to display information on a printed page or on the screen. There are four views used with a report. These are the Report view, Layout view, Design view, and Print view.

Take a look at report views for the Northwind 2007 database. Follow these steps:

1. Click the Reports category in the left pane to see available reports.

2. Double-click the Customer Address Book (see Figure 1.22). You'll probably have to scroll the vertical scroll bar to find it.
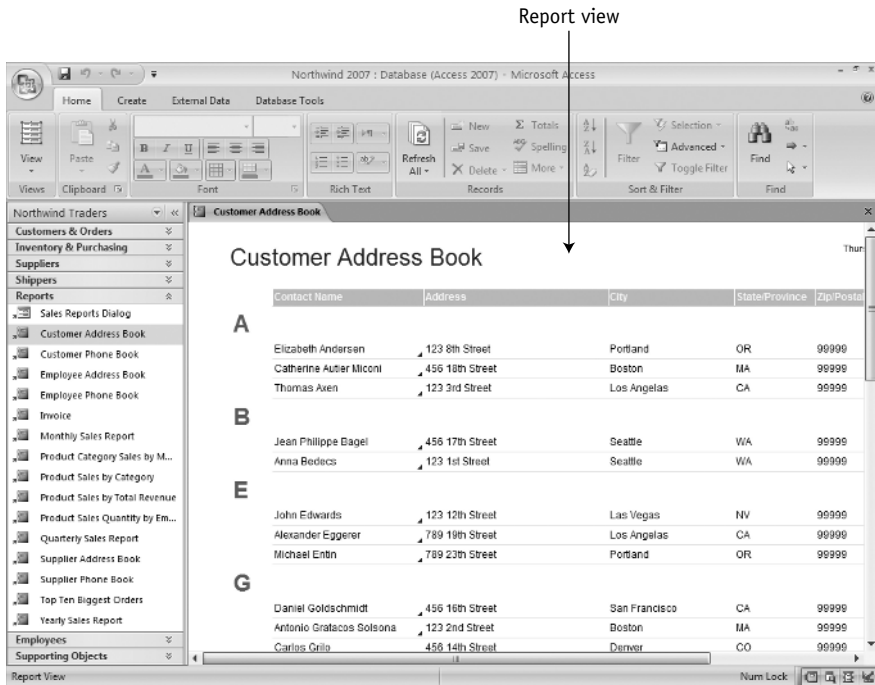
Report view

Figure 1.22. The Report view is used to show how data appears in print.

> **Inside Scoop**
>
> Access 2007 displays a message whenever there isn't data to display in the Report view. Click OK if you see this message so that you can see the Report view without the data.

Report view

The Report view shows customer names and addresses in a tabular report. Kind of strange that all the customers live at the same address, but remember this is only sample information.

The report has a title, column headings, and a page number (you have to scroll down to see it).

Notice that the names are underlined and there is an arrowhead at the beginning of each address. Click these to see a form that contains detailed information about the customer and address.

Layout view and Design view

The *report* Layout view and the Design view are nearly the same as the *form* Layout view and Design view, and they are used to create a report.

Right-click the Customer Address Book tab and select the Layout view or Design view.

In the Design view the report is divided into sections.

The report Design view sections the report as Report Header, Page Header, File As Header, Detail, Page Footer, and Report Footer.

Objects in the Report Header and Report Footer appear just once. The Report Header appears at the beginning of the report, and the Report Footer appears at the end of the report.

The Page Header is printed at the top of every page and the page footer prints at the end of every page.

File As Header is used to group information that is identified as a group.

The Detail section appears once for each record. This is the main body of the report.

At the top of the screen is the Design tab that contains tools for designing the report.

Print Preview

Right-click the Customer Address Book tab and click Print Preview from the pop-up menu to see how the report will look when printed by your printer. The Print Preview tab (see Figure 1.23) at the top of the screen provides tools to modify how the report is printed.

These tools should be very familiar because they combine the Page Setup, Print Preview, and Print options that you find in the File menu of most Windows applications.
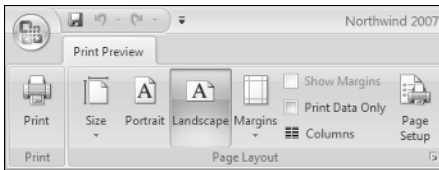

Figure 1.23. The Print Preview tab has all the tools you need to decide how your report is printed on paper.

Navigating the Ribbon

The Ribbon replaces menus and contains all the tools you need to complete any job. The contents of the tab change depending on what you're doing.

Some tools are grayed, indicating that they're only available if you do something else. For example, sorting is grayed until records are entered into a table. This is standard operating procedure for most Windows applications.

There are five tabs that are available when you create a blank database. These are Home, Create, External Data, Database Tools, and the Datasheet tab.

The Home tab is available all the time (see Figure 1.24) and contains many of the tools you use all the time.

Inside Scoop

The mouse cursor changes to a plus or minus when you move it onto the report. The plus indicates you can enlarge the image of the report, and the minus reduces the image of the report when you click the mouse button.
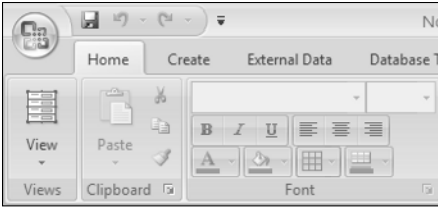
Figure 1.24. The Home tab appears all the time.

The Create tab (see Figure 1.25) has tools you need to create tables, forms, reports, queries, and macros. *Macro* is probably one of those new terms you rarely heard before. Think of a macro as instructions for Access 2007 to do something, such as when the user clicks a button on a form.
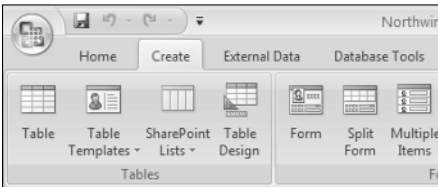

Figure 1.25. The Create tab is used to create tables, forms, reports, queries, and macros.

The External Data tab (see Figure 1-26) has tools to import data from other sources such as Excel and export data so it can be used with other applications. There are also tools to create and reply to e-mails and share your database to a SharePoint Web site.
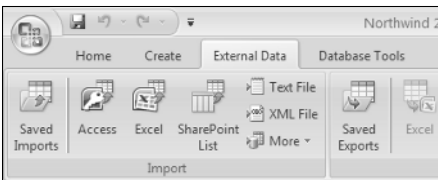

Figure 1.26. The External Data tab is used to import and export data enabling interaction with other applications.

The Database Tools tab (see Figure 1-27) is used to interact with the database such as running a macro, show or hide, move data, or analyze data. There are also tools to secure the database.
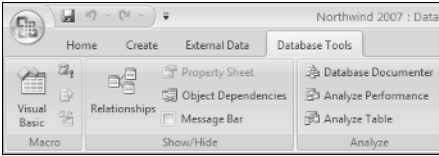
Figure 1.27. The Database Tools tab is used to interact with the database.

The Datasheet tab (see Figure 1.28) has tools used to modify the table, such as inserting new fields and adding a lookup column. You also find tools to associate tables, which I discuss further in the next chapter.
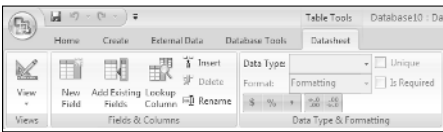

Figure 1.28. The Datasheet tab is used to modify the table.

Just the facts

- Place Access 2007 on the Quick Launch toolbar for a quick start
- Create a shortcut for Access 2007 and place it on the desktop.
- Tabs on the Ribbon replace menus and contain groups of commands used to interact with Access 2007.
- A gallery is a control that shows what the command can do and the results of using the command.
- The Quick Access toolbar is in the upper-left corner of the window next to the Office Button.
- There are three types of views for working with forms: Form view, Layout view, and Design view.
- Data views are used to display data without building a form. Data views are: Datasheet view, Design view, PivotTable view, and PivotChart view.
- A report is used to display information on a printed page. There are four views used with a report — Report view, Layout view, Design view, and Print view.