Access for Accounting

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In this chapter you will learn:

- Access's capabilities and new features
- How to start, navigate, and work with Access files
- How to use Access help
- How Access is used in accounting

Case: What SUP, Inc.

Nathan and Meagan have expressed an interest in other software that might be able to help them in their business. Kyle asks them what kinds of records they keep for customer orders and inventory control.

"We keep records by hand now, and it is very tedious and problematic," Meagan responds. "I have a file for customers, suppliers, products, et cetera, but often they get misplaced and are frequently out of date. It's difficult to keep track of it all!"

"Well, perhaps a database management system might help you out," suggests Kyle.

"What's a database management system?" asks Nathan.

Kyle explains that, as their business grows, the information available to them will increase as well. A database management system (DBMS) can help. "Essentially, a DBMS is a tool for storing, retrieving, and interpreting information in an effective and useful way. These days, Microsoft's Access program, a relational database management system, has proven to be a very successful tool in combating information overload."

"Hold on," warns Nathan. "What is a relational database?"

"Ok, let's go slowly," responds Kyle. "Let me walk you and our student assistant through the basics and I'll define relational database then."

"Great," you respond. "I know businesses use databases every day, and this way I can get a better insight on how they are created and used."

Understanding Access's Capabilities and New Features

Access is a DBMS that organizes a collection of related information used for a specific purpose. For example, information about What SUP's customers, its suppliers, and its products could be three different databases in and of

themselves. A relational database is one in which information is divided into separate stacks of logically related information, each of which is stored in a separate table in the file. Thus, tables are a critical part of a DBMS, and the relations among the tables are key to its success.

Tables can be related in three different ways: one-to-many, one-to-one, and many-to-many. For instance, the supervisor of an accounting department may have many employees who work under her; however, all the employees who work for her have only one supervisor. This would be a one-to-many relationship: one supervisor to many employees. Another example is the chief financial officer (CFO), who reports to the chief executive officer (CEO). This is a one-to-one relationship because there is only one CEO and one CFO. Still another example is the construction worker who works on many different jobs and each job requires many different workers. This is an example of a many-to-many relationship. The most common of these, and the ones you'll experience here, are the one-to-many relationships.

The DBMS includes more than just tables, of course. Queries, forms, and reports based on the data stored in tables are what make up the management component of DBMS. Before you get too far, Kyle suggests you learn how to start Access.

What's new in Access 2013? In a word, apps. An Access web app is a new type of database that you build in Access, then use and share with others as a SharePoint app in a web browser. To build an app, you just select the type of data you want to track (contacts, tasks, projects, and so on). Access creates the database structure, complete with views that let you add and edit data. Navigation and basic commands are built-in, so you can start using your app right away.

Microsoft has included Intellisense in the Expression and Query Builder portions of Access. Intellisense helps complete the field names and other items you might use in these areas. This reduces the margin of error when working with queries and expressions, as well as the time spent looking up the spelling of field names in large databases. Access 2013 also allows conditional formatting within reports, showing the information that meets a certain condition or set of conditions. To use or change the conditional formatting rules in a report, open the report, choose the Format tab on the Ribbon, and then select the Conditional Formatting option.

Starting, Navigating, and Working with Access Files

Kyle asks you if you are familiar with starting programs in Windows XP. Nathan and Meagan don't know much about computers, so you offer to demonstrate. First you explain that starting Access is the same regardless of whether the computer's operating system is Windows 7, 8, XP, or Vista, and then you offer to demonstrate the process for starting Access in Windows XP.

To start Access:

- 1 Click the **Start** button.
- **2** Click All Programs, then click the Microsoft Office folder, and then click Microsoft Office Access 2013. Your window may look like Figure 8.1.

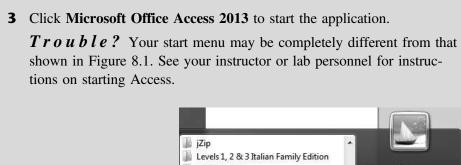




Figure 8.1
Starting Access

Nathan's laptop has Access installed as well, so he has been duplicating Kyle's actions on his own computer, whose screen looks somewhat different than Kyle's—in particular, Kyle's Quick Access Toolbar and Ribbon seem different. Kyle explains that screen size can change the appearance of the Ribbon and that, just like Access itself, both its Ribbon and Quick Access Toolbar can be customized.

To illustrate, Kyle starts Access and creates a new blank database file named Database1. He has captured his Access window (see Figure 8.2) and provided callouts and an explanation of the Access window characteristics. He reminds you that the user interface described here is similar to Excel's interface, so much of this will sound familiar.

File Menu – The File menu is where you manage your files and the data about them-creating, saving, inspecting for hidden metadata or personal information, and setting options. In short, it is everything that you do to a file that you don't do in the file.

Quick Access Toolbar – At the top of the Access window is the Quick Access Toolbar, which is designed to provide an easy way to execute the commands used most often. The default setting in Access provides access to the Save, Undo, and Redo commands.

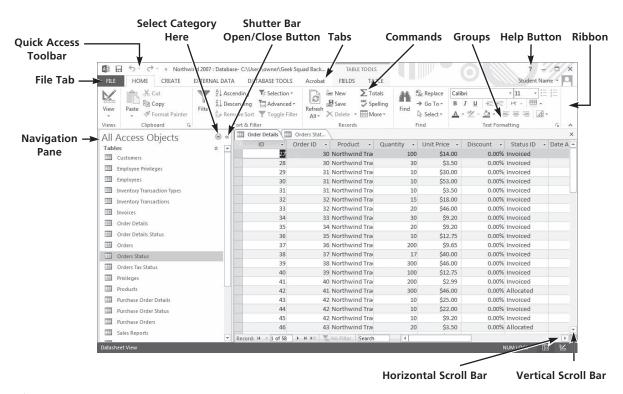


Figure 8.2
The Access Window

Ribbon - There are three basic components of the Ribbon.

- **1** Tabs: There are several of them across the top depending on whether you have added any add-ins to Access; each represents core tasks you do in Access.
- **2** Groups: Each tab has groups that show related items together.
- **3** Commands: A command is a button, a box to enter information, or a menu.

The principal commands in Access are gathered on the second tab, the Home tab. The commands on this tab are those that Microsoft has identified as the most commonly used when people do basic tasks with databases. For example, the Paste, Cut, and Copy commands are arranged first on the Home tab, in the Clipboard group. Font formatting commands are in the Font group. Groups pull together all the commands you're likely to need for a particular type of task, and throughout the task they remain on display and readily available, instead of being hidden within menus. These vital commands are visible above your work space.

The commands on the Ribbon are the ones you use the most. Instead of showing every command all the time, Access 2013 shows some commands in response to an action you take. When you see an arrow (called the Dialog Box

Launcher) in the lower right corner of a group, there are more options available for the group. Click the arrow, and you'll see a dialog box or a task pane.

Navigation Pane – At the left of the Access window is the Navigation Pane. New in Microsoft Office Access 2013. It is a central location from which you can easily view and access all database objects such as tables, queries, forms, and reports. The Navigation Pane replaces the Database window, which was used in earlier versions of Access.

Other Access Window Items – Like all Windows screens, scroll bars control your view of the worksheet (horizontal and vertical).

To demonstrate some of Access's features, Kyle suggests you follow along while he opens an Access file:

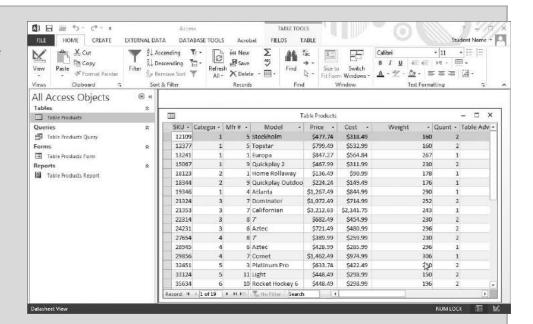
- **1** Open Access, if you closed it previously.
- **2** Click the drop-down arrow on the right of the Quick Access Toolbar and then click **More Commands**.
- **3** Scroll down the list of popular commands and then double-click the text **Open** and then click **OK**. Note that your Quick Access Toolbar now shows a folder icon, which gives you a quick way to open new files.
- **4** Click the new **Open** icon in the Quick Access Toolbar to open a new file. (*Note:* If you are using Access in a computer lab environment, your changes to the Quick Access Toolbar may not reappear the next time you start Access.)
- **5** Navigate the Open window to the location of this text's student files. (The location would be the CD provided with the text or from your computer lab's server.)
- **6** Double-click the file **ch8-01**, which should be located in a Ch 08 folder.
- **7** Click the **Shutter Bar Open/Close** button a few times to see how it opens and closes the Navigation pane.
- **8** With the Shutter Bar Open, select **All Access Objects** as the category and **Object Type** as the category view.
- **9** Click the **Table** header a few times to see how you hide or show its contents. (*Note:* This works for all group headers like tables, queries, forms, and reports. The navigation pane does not display empty groups; if this database did not have any reports, the group header would not display.)
- **10** Double-click the **Table Products** table. The table shown in Figure 8.3 should appear.
- 11 Click the File tab and then click the text Save As. Then click the Save

 Database As button and then select Access Database (*.accdb) as the

 Database File Type. (This is done to keep your original student file available,
 in case you need it again, and also to provide a unique name for your file.)

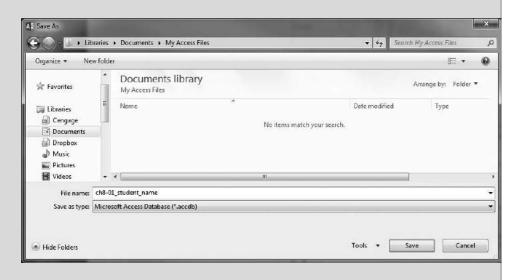
Trouble? The action above was designed to save the entire database with a different file name. It is not the same as clicking the Save Object command, which only saves the current object (table, query, form, report etc.).

Figure 8.3 Sample Table



- **12** Click **Save As** and then click **Yes** when asked if you want Access to close all open objects.
- **13** Add your name to the file name using the underscore key, as shown in Figure 8.4. In this example the file will be saved as ch8-01_ student_name into a folder called My Access Files. You should replace "student_name" with your name.

Figure 8.4 Saving a Database



14 Click Save.

Now that you've had a brief view of how to start, navigate, and work with Access files, it's time to become familiar with Access's help features.

Getting Access Help

Access's help features are quite extensive. Whenever you are working with Access and are not certain how to create tables, queries, forms or reports you should press the [F1] function key or click the blue and white question mark on the Tab bar. To illustrate, Kyle decides to show you Access's help feature while trying to create a new table.

To view Access's help to create a new table:

1 Press the [**F1**] function key or click the blue and white question mark to open Access's help window, as shown in Figure 8.5.

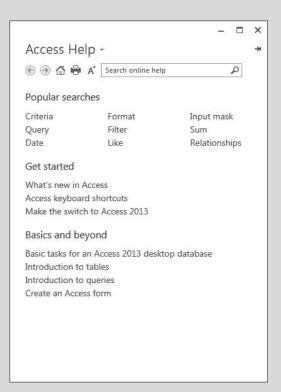
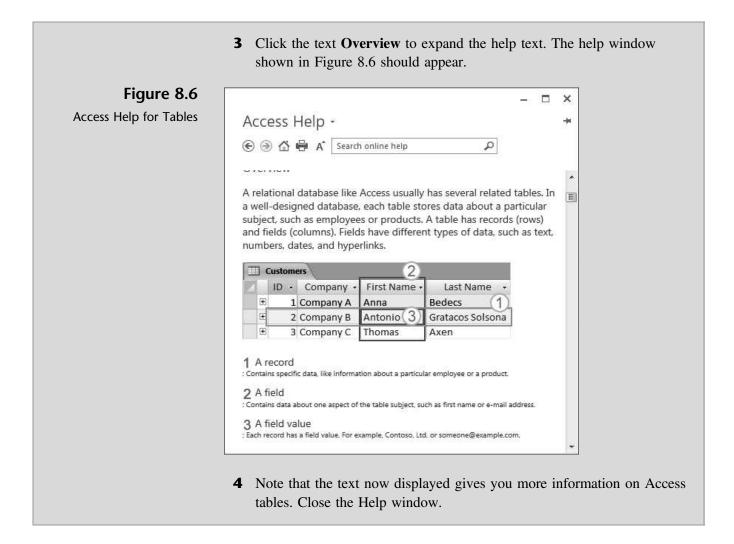


Figure 8.5

Access's Help Window

Trouble? You do not have to be connected to the Internet to get Access help. However, the online help is much more extensive. This example assumes you are connected to the Internet. If you are not connected, click the text **Show me offline help from my computer** to view Access help, keeping in mind your window may not match the Figures shown in the text.

2 Click **Introduction to tables** from the Access Help window.



Now that you're familiar with Access's help feature, Kyle thinks it would be a good idea to explore how Access is used in the accounting field.

Examples of How Access Is Used in Accounting

There are an unlimited number of ways Access can be used in accounting. This text will focus on how Access can be used to track inventory, but of course that is just one example.

Accounting programs like QuickBooks and Peachtree are nothing more than sophisticated databases. Each organizes information by accounts, such as assets (cash, accounts receivable, inventory, etc.), liabilities (e.g., accounts payable), and equities (common stock and retained earnings). Revenue and expense transactions are also organized by accounts. A user who wants to create an income statement is simply creating a query that says, in essence, "give me the sum of all revenues and all expenses that occurred for a specific period." Thus the transactions are filtered by date and by account types.

All the major asset and liability accounts are supported by a database. For example, the accounts receivable balance sheet account is supported by a detailed subsidiary ledger that can explain how much each customer owes at any point in time, and a query can be generated that filters the information by date and by customer. Fixed assets accounts (e.g., furniture and fixtures, equipment, buildings) are supported by a detailed subsidiary ledger that can explain the cost of each asset, its economic useful life, its accumulated depreciation, and so forth. The accounts payable balance sheet account is supported by a detailed subsidiary ledger that can explain how much the company owes each vendor at any point in time; a query can be generated that filters the information by date and by vendor. Figure 8.7 shows a report that summarizes a firm's sales for the year. This report was created from an Access database designed to capture business events for a firm. Figure 8.8 illustrates a query of inventory on order the same Access database.

Yearly Sales Report

Saturday, November 16, 2013

Figure 8.7
Sales Report

Product	Q1	Q2	Q3	Q4	Tota
Northwind Traders Coffee	\$14,720.00	\$230.00	\$0.00	\$0.00	\$14,950.00
Northwind Traders Beer	\$1,400.00	\$5,418.00	\$0.00	\$0.00	\$6,818.00
Northwind Traders Marmalade	\$0.00	\$3,240.00	\$0.00	\$0.00	\$3,240.00
Northwind Traders Mozzarella	\$0.00	\$3,132.00	\$0.00	\$0.00	\$3,132.00
Northwind Traders Clam Chowder	\$1,930.00	\$868.50	\$0.00	\$0.00	\$2,798.50
Northwind Traders Curry Sauce	\$680.00	\$1,920.00	\$0.00	\$0.00	\$2,600.00
Northwind Traders Chocolate	\$1,402.50	\$1,147.50	\$0.00	\$0.00	\$2,550.00
Northwind Traders Boysenberry Spread	\$250.00	\$2,250.00	\$0.00	\$0.00	\$2,500.00
Northwind Traders Crab Meat	\$0.00	\$2,208.00	\$0.00	\$0.00	\$2,208.00
Northwind Traders Dried Apples	\$530.00	\$1,590.00	\$0.00	\$0.00	\$2,120.00
Northwind Traders Ravioli	\$0.00	\$1,950.00	\$0.00	\$0.00	\$1,950.00

Payroll is supported by a database as well. Information is collected from employees that includes Social Security number, address, pay rate, exemptions, and deductions. Time-keeping databases collection information about how many hours an employee worked on a particular job, day, or area. All of this information is stored in employee tables and payroll time tables and is then used to compute payroll expenses, withholding, paychecks, and cost distributions. Figure 8.9 shows a form used to collect time data.

The list of database applications for accounting is unlimited, and the illustrations given here are just the tip of the iceberg. However, the goal of this text is to introduce you to the fundamentals of database design and use, so we will focus on how to create tables, queries, forms, and reports that are related to inventory control only.

Figure 8.8 Sample Query

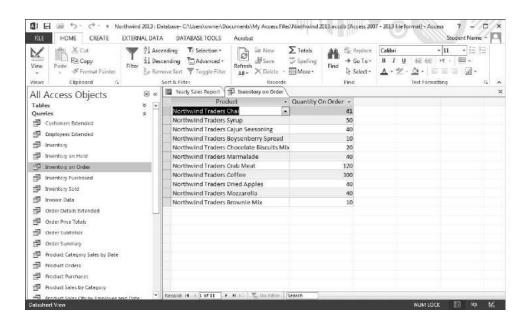
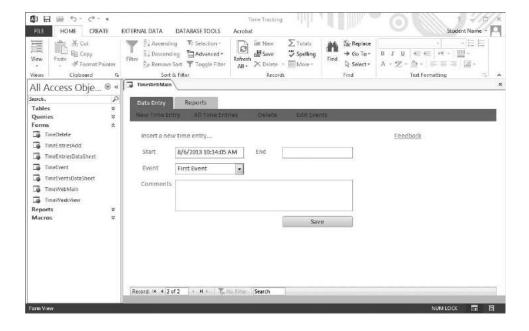


Figure 8.9
Sample Form



End Note

The three of you are impressed by your first exposure to Access and pleased with your accomplishments so far. You've learned some of Access's capabilities and new features; how to start, navigate, and work with Access files; how to use Access help; and how Access is used in accounting.

In the next chapter you will learn how to create tables, queries, forms, and reports as well as how to print in Access.

Chapter 8 Questions

- What is a DBMS?
- What is a relational database?
- How are tables related?
- Identify some new features in the 2013 version of Access.
- Why would you use the File menu in Access?
- What and where is the Quick Access Toolbar?
- Describe the Ribbon.
- What and where is the navigation pane?
- What is the quickest way to access help while in Access?
- Describe ways in which Access is used in Accounting.