

# **Access Lesson**

## **Microsoft Access Basics**

# Objectives

- Understand databases and database terminology.
- Start Access, open a database, and open an object.
- Navigate a datasheet, edit a record, and undo a change.
- Select records and fields, and delete a record.

# Objectives (continued)

- Cut, copy, and paste data.
- Change the appearance of a datasheet.
- Preview and print a table.
- Close an object and exit Access.

# Vocabulary

- best fit
- compacting
- database
- database management system (DBMS)
- datasheet
- datasheet selector
- Datasheet view
- field
- field name
- field selector
- field value
- Navigation Pane
- record
- record selector

# Database Basics

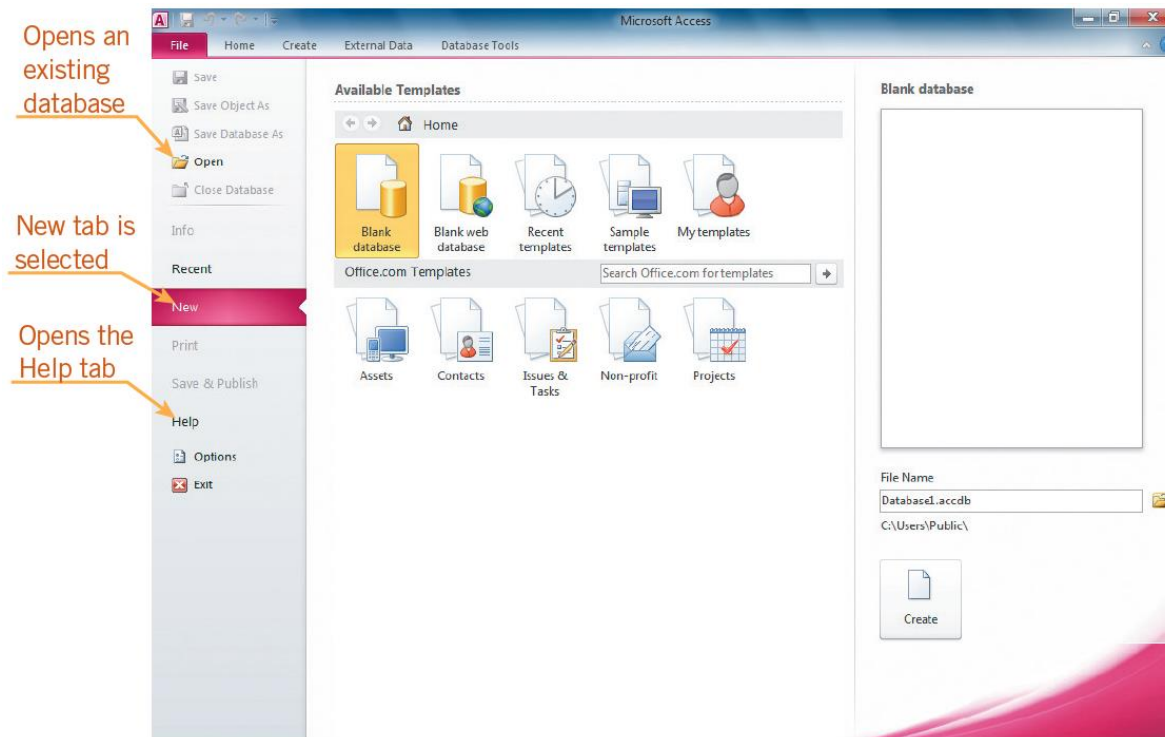
- Access is a **database management system (DBMS)** which allows you to store, retrieve, analyze, and print information.
- A DBMS does not have to be computerized; it can be simple file folders.
- However, a computerized DBMS is faster, more flexible, and more accurate than a manual system.

# Starting Access

- Click the **Start** button on the taskbar.
- Click **All Programs** on the Start menu.
- Click the Microsoft Office folder.
- Click Microsoft Office Access 2010.
- After a few seconds, Access starts and opens Backstage view.

# Starting Access (continued)

- New tab in Access Backstage view









# Opening a Database

- A **database** is a collection of objects.
- The objects work together to store, retrieve, display, and summarize data.
- The object types are **tables, queries, forms, reports, macros, and modules.**



# Opening a Database (continued)

- This table describes each type of database object and shows the icon used to identify the object in the Navigation Pane.

OBJECT	ICON	DESCRIPTION
Table		Stores all the data in the database in a format called a datasheet. A datasheet is similar in appearance to a worksheet. A database usually contains many tables.
Query		Used to search for and retrieve data from tables using conditions. A query is a question you ask the database.
Form		Displays data from one or more tables or queries in a format that might be similar in appearance to a paper form.
Report		Displays data from one or more tables or queries in a format that is usually customized for on-screen viewing or printing. A report is commonly used to summarize data and to calculate totals.
Macro		Automates database operations by allowing you to issue a single command to perform a task, such as opening a form or closing a database.
Module		Similar to a macro, but allows more complex programming of database operations. Creating a module requires the use of a programming language.

# Opening a Database (continued)

- A **record** is a complete set of data.
- Each record is made up one or more **fields**.
- Each field has a **field name**.
- The data in the field is the **field value**.
- In **Datasheet view**, the table displays the data in rows and columns in a datasheet.

# Opening a Database (continued)

- Records and fields in a table

The screenshot displays the Microsoft Access interface with the 'Table Tools' ribbon active. The 'Members' table is open, showing a list of members. The table has the following fields: Member ID, Last Name, First Name, Address, City, State, Zip Code, Home Phone, Cell Phone, and Membership Type. The first record is highlighted in blue.

Annotations:

- Field name:** Points to the 'State' column header.
- Record:** Points to the first row of data (Arriaga, Aurora).
- Field value:** Points to the value '80109' in the 'Zip Code' column for the first record.

Member ID	Last Name	First Name	Address	City	State	Zip Code	Home Phone	Cell Phone	Membership Type
101242	Arriaga	Aurora	207 Golden Cv	Colorado Sprin	CO	80929	719-555-0900		Family
254312	Fraze	William	6000 Abilene T	Denver	CO	80241	303-555-4541	303-555-8465	Individual
434871	Stevens	Shane	16902 Ardisia E	Denver	CO	80265	303-555-7410	303-555-9811	Senior
452132	Enders	Mary Jo	401 Treys Way	Denver	CO	80232	303-555-7864	303-555-7355	Family
543120	Maggi	Joe	2324 Tamworth	Castle Rock	CO	80109	303-555-0943		Senior
543744	Buchanan	Bruce	P O Box 5411	Colorado Sprin	CO	80915	719-555-3601	719-555-5655	Individual
746810	Mackin	Betty	8400 Cima Oak	Castle Rack	CO	80109	303-555-2131	970-555-8641	Senior
846000	LaPorte	Ian	1408 Preston A	Denver	CO	80243	303-555-8700	303-555-7120	Family
874301	Stevens	Bruce	7109 Carwill Dr	Denver	CO	80280	303-555-4511	303-555-3479	Individual
976541	Rochstein	Andy	1809 Berkeley	Denver	CO	80232	303-555-2649	303-555-8747	Family

# Opening a Database (continued)

- You can use the pointer to move the insertion point to any field in a table by clicking in the desired field.

KEY	DESCRIPTION
Enter, Tab, or right arrow	Moves to the next field in the current record
Left arrow or Shift+Tab	Moves to the previous field in the current record
End	Moves to the “Click to Add” column in the current record
Home	Moves to the first field in the current record
Up arrow	Moves up one record and stays in the same field
Down arrow	Moves down one record and stays in the same field
Page Up	Moves up one screen for the current field
Page Down	Moves down one screen for the current field
Ctrl+Home	Moves to the first field in the first record
Ctrl+End	Moves to the last field in the last record

Using the keyboard to navigate in Datasheet view

# Editing Records

- To make editing easier, use the record navigation bar.
- If you make a mistake, you can click the **Undo button** on the Quick Access Toolbar.
- **Field selector** selects the column.
- **Record selector** selects the row.
- **Datasheet selector** selects the entire datasheet.

# Editing Records (continued)

- To **delete** a record, select the record and press Delete.
- Deleting a record is permanent and cannot be restored with the Undo command.
- The **Cut, Copy, and Paste commands** work the same way as in other Office programs.

# Changing Datasheet Layout

- To change:
  - **Row height:** Drag row border or input exact height.
  - **Column width:** Drag column border or choose best fit.
  - **Column order:** Drag field selector
- To **freeze** columns, use Freeze command on Home tab.
- To change **background row color**, use Alternate Fill/Back Color button on Home tab.

# Previewing and Printing a Table

- Use Print Preview to check the print settings.
- Print a datasheet by clicking the File tab, clicking Print in the navigation bar, and then clicking:
  - Quick Print to print the datasheet using the default printer and the default print.
  - Print to select a printer and adjust the print settings.



# Saving and Closing Objects

- When you change data, Access saves your changes automatically.
- When you change format, you need to save your work by clicking the Save button on the Quick Access toolbar.
- You can close an object by clicking the Close button on the object window.

# Compacting and Repairing a Database

- **Compacting** a database rearranges how the data is stored to optimize performance.
- Access combines **compacting and repairing** into one process.

# Closing a Database and Exiting Access

- Close a database by clicking the **File** tab on the Ribbon, and then clicking **Close Database** in the navigation bar.
- As in other Office 2010 programs, you exit Access by clicking the File tab on the Ribbon, and then clicking Exit.

# Summary

In this lesson, you learned:

- Access is a program known as a database management system (DBMS). A DBMS allows you to store, retrieve, analyze, and print information.
- A database is a collection of objects. The objects work together to store, retrieve, display, and summarize data and also to automate tasks. The object types are tables, queries, forms, reports, macros, and modules. You can open an object by double-clicking it in the Navigation Pane.

# Summary (continued)

- You can open an existing database by clicking the File tab on the Ribbon, clicking Open in the navigation bar, and then browsing to and double-clicking the database you want to open. You can also click the File tab on the Ribbon, and then click Recent in the navigation bar to select the database from a list of recently opened files.

## Summary (continued)

- You can use the keys on the keyboard to move through the records and fields in a datasheet. You can also use the buttons on the record navigation bar in Datasheet view to move around the datasheet. The record navigation bar buttons allow you to select the first record, the last record, the previous record, or the next record. You can also use a button to add a new record or use the Current Record box to select a specific record.

# Summary (continued)

- A record is a complete set of data. Each record is made up of one or more fields. Each field is identified by a field name. The data entered into a field is called a field value. To select an entire row in a datasheet, click the record selector for the row. To select an entire field in a datasheet, click the field selector at the top of the column. To select multiple columns, click the field selector for the first column, press and hold down Shift, click a field selector in another column, and then release Shift. To select all fields and rows in a datasheet, click the datasheet selector.

# Summary (continued)

- To delete a record from a table, select the record and then press Delete. Use the Cut, Copy, and Paste buttons in the Clipboard group on the Home tab to move and copy data. Clicking the arrow at the bottom of the Paste button and then clicking Paste Append appends a copied or cut record to the bottom of the datasheet.
- You can make many layout changes to a datasheet, such as changing the row height or column width, freezing columns, and changing the background row color of every other row.



# Summary (continued)

- Before printing a database object, use Print Preview to check the print settings and to adjust the way the object is printed.
- You can close an object by clicking its Close button. To exit Access, click the Close button on the title bar.