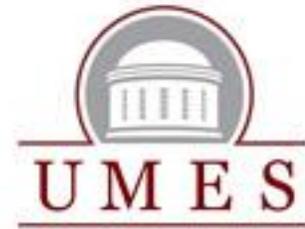


SUMMER 2014



**UMES Center
for Student
Technology
Competency
and
Microsoft
Certification**

MOS ACCESS 2010

**A TITLE III SPONSORED
PROGRAM**

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ABOUT THE MOS TESTS

By preparing for the MOS tests you will find that you will greatly increase your familiarity with the software. You will discover tools and features that you may not have previously known existed and which may be extraordinarily useful. You will also learn that the software is capable of more than you had expected, which may in turn increase your daily proficiency.

By earning Microsoft Office Specialist certifications you will be receiving a globally-acknowledged and industry-recognized credential. Delivered by Certiport, this is the only credentialing program endorsed by the Microsoft Corporation.

When you pass a Microsoft Certification exam, you become a member of the Microsoft Certified Professional (MCP) community with access to all of the benefits provided through the Microsoft Certification Program. You can use your Microsoft account to access the MCP member sites, where you'll find lots of ways to keep your skills relevant, applicable, and competitive.

Exams you pass and certifications you earn become part of your official transcript, which you can allow potential employers to access directly. A Microsoft Certification is an industry standard that is recognized worldwide and can help open doors to potential job opportunities. A number of studies have validated the benefits of MOS certification:

TEST TAKING TIPS

The questions are not worded to be tricky or misleading. For success a test taker just needs to be well versed in the software application, ready to be persistent and search for the correct answer, and pace their self.

Here are some tips for taking the test:

- Learn all of the tabs and associated groups
- Be familiar with the File Tab also known as Backstage View
- Learn Access Options
- If you are not sure about a question, select skip to move ahead. You will be able to return to the question at the end of the test.
- If you think that you have clicked too many places looking for the answer, you can reset the question and start again and you will not be penalized.
- Keep track of the time. You neither want to move too sluggishly nor at a hurried pace.
- Do not over think questions. As mentioned above, they are not worded to be misleading.
- Stick to the literal. Here is an example from the MS Word Test 2007 where a question asked test takers to change the initials of a user, you may be inclined to change the author's information. This would be incorrect. The author information is part of a document's properties and is specific to a single document. The user is set at the software level by visiting Word Options.

SKILLS MEASURED

The MS Access 2010 exam measures your ability to accomplish the technical tasks listed below.

Please note that the questions may test on, but will not be limited to, the topics described in the bulleted text.

CREATE AND MANAGE A DATABASE

- Use Save Object As, Open, Save and Publish, Compact and Repair Database, and Encrypt with Password commands, create a database from a template, and set Access options
- Configure the Navigation pane
- Rename objects, delete objects, and set Navigation options
- Apply Application Parts
- Use Blank Forms, Quick Start, and user templates

****You will find all necessary instructions necessary in the training section of this document.***

BUILD TABLES

- Create tables in Design view
 - Create and modify fields
 - Insert a field, delete a field, rename a field, Hide or Unhide fields, Freeze or Unfreeze fields, modify data types, modify the field description, and modify field properties
 - Sort and filter records
 - Use Find, Sort, and Filter commands
 - Set relationships
 - Define Primary Keys, use Primary Keys to create Relationships, and edit Relationships
 - Enter and format text
 - Use text effects; change the indentation, alignment, line spacing, and direction of text; change the formatting of bulleted and numbered lists; enter text in a placeholder text box; convert text to SmartArt; copy and paste text; use Paste Special, and use Format Painter
 - Import data from a single data file
 - Import source data into a new table, append records to an existing table, and import data as a linked table

****Microsoft offers an excellent self-paced online training module that covers this topic available at <http://office.microsoft.com/en-us/access-help/create-tables-for-a-new-database-RZ101772997.aspx>***

BUILD FORMS

- Create forms
 - Use the Form Wizard, create a blank form, use Form Design tools, and create Navigation forms
- Apply Form Design Tab options
 - Use the Themes, Controls, Header/Footer, and Tools groups
- Apply Form Arrange Tab options
 - Use the Table, Move, and Position groups
- Apply Form Format Tab options
 - Use the Background and Control Formatting groups

****You will find all necessary instructions necessary in the training section of this document.***

CREATE AND MANAGE QUERIES

- Construct queries
 - Use Select, Make Table, Append, and Crosstab query types
- Manage source tables and relationships
 - Use the Show Table and Remove Table commands, and create ad hoc relationships
- Manipulate fields
 - Add, remove, and rearrange fields, and use Sort and Show options
- Calculate totals
 - Use the Total row, and use Group By
- Generate calculated fields
 - Perform calculations, use the Zoom box, and use Expression Builder
- ****Microsoft offers an excellent self-paced online training module that covers this topic available at <http://office.microsoft.com/en-us/access-help/create-queries-for-a-new-database-RZ101772999.aspx>***

DESIGN REPORTS

- Create reports
 - Create a blank report, use Report Design tools, and use the Report Wizard
- Apply Report Design Tab options
 - Use the Themes, Grouping & Totals, Controls, Header/Footer, and Tools groups

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- Apply Report Arrange Tab options
 - Use the Table, Move, Position, and Sizing & Ordering groups
- Apply Report Format Tab options
 - Add color, background images, and conditional formatting
- Apply Report Page Setup Tab options
 - This objective may include, but is not limited to, using the Page Size and Page Layout groups
- Sort and filter records for reporting
 - Use the Find, Sort, and Filter commands, and use view types

****You will find all necessary instructions necessary in the training section of this document.***

SAMPLE TEST TASKS

In the previous section we addressed the skills accessed on the MS Access 2010 certification exam. In this section we will present you with a number of examples of the type of tasks that are typically found on MS Access certification tests. These tasks may or may not comprise the 34 questions that will appear on your certification exam.

- Back up a database
- Create a new database based on a template
- Apply a template to an existing database
- Apply a theme
- Modify a Table Relationship
- Enforce Referential Integrity
- Name or rename a table
- Add a calculated field
- Change field margins
- Create new forms
- Create a variety of different fields
- Modify dependencies
- Create text or number validation rules
- Use the expression builder
- Use application parts
- Create a look up column
- Change a report layout
- Modify page set up
- Hide margins
- Create a new query
- Include but hide a field in a query
- Query a single record source
- Make a query ask for input
- Use a formula in a query
- Query multiple record sources
- Change field order in a query
- Edit query criteria to display only what meets a certain condition
- Use a query to automate the deletion of multiple records
- Create a calculated query
- Create a crosstab query
- View code
- Change theme
- Modify Options
- Build a macro
- Create a new report
- Apply a filter to report or table
- Adjust the primary key field
- Create a new table
- Change the background color
- Create a split form
- Protect the database
- Modify table layout
- Add a new record to a database
- Modify an existing record
- Sort records
- Apply conditional formatting
- Rename a database
- Import data into Access from a different file source
- Modify a field description
- Use text effects
- Modify line spacing
- Convert text to SmartArt
- Paste Special
- Import data as a linked table
- Change indentation
- Modify bullets

TRAINING INSTRUCTION FROM THE MICROSOFT CORPORATION

DATABASE BASICS

WHAT IS ACCESS?

Access 2010 is a database application design and deployment tool that you can use to keep track of important information. You can keep your data on your computer, or you can publish to the Web — so others can use your database with a web browser.

Many people start using Access when the program that they are using to keep track of something gradually becomes less fit for the task. For example, suppose you are an event planner, and you want to keep track of all the details that you need to manage to make your events successful. If you use a word processor or spreadsheet program to do this, you can easily run into trouble with duplicate and inconsistent data. You can use calendaring software, but tracking financial information in a calendar isn't a good fit.

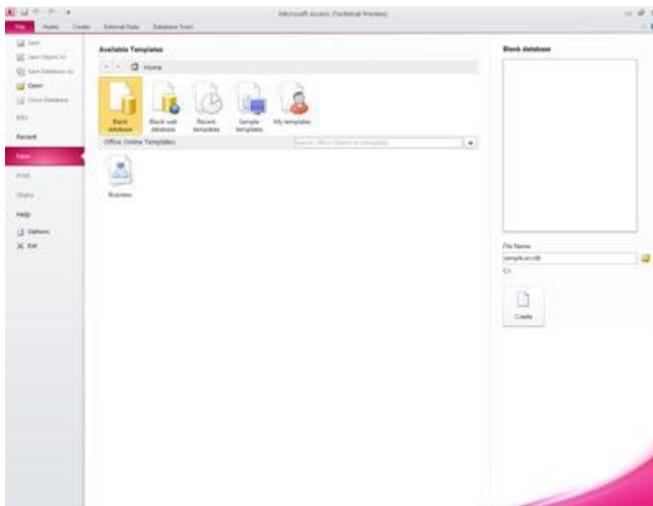
Relational databases in Access

Sometimes you need a relational database to track such information — a storehouse of data that has been separated into smaller collections of data (called tables) to eliminate redundancy, and then related together based on common bits of information (called fields). For example, an event planning relational database might contain a table with customer information, a table with vendor information, and a table with event information. The table with event information might have a field to relate it to the customer table, and a field to relate it to the vendor table. That way, for example, if a vendor's phone number changed, the information could be changed once in the vendor table, instead of in every event that involved the vendor.

Access is a tool that you can use to quickly and easily develop relational database applications that help you manage information. You can create a database to help you keep track of just about any kind of information, such as inventory, professional contacts, or business processes. In fact, Access comes with templates that you can use right away to track a variety of information, making things easy even for a beginner.

When you open Access

When you start Access 2010, you see the Microsoft Office Backstage view, where you can get information about the current database, create a new database, open an existing database, and view featured content from Office.com.



FIND AND APPLY A TEMPLATE

Access provides you with a wide variety of templates that you can use to speed up your database creation process. A template is a ready-to-use database that contains all of the tables, queries, forms, and reports needed for performing a specific task. For example, there are templates that can be used to track issues, manage contacts, or keep a record of expenses. Some templates contain a few sample records to help demonstrate their use. Template databases can be used as is, or you can customize them to better fit your needs.

To find and apply a template to your database, do the following:

1. On the **File** tab, click **New**.
2. Under **Available Templates**, do one of the following:
 - To reuse a template that you've recently used, click **Recent Templates**, and then select the template that you want.
 - To use a template that you already have installed, click **My Templates**, and then select the template that you want.
 - To find a template on Office.com, under **Office.com Templates**, click a template category, select the template that you want, and then click **Download** to download the template from Office .com to your computer.

NOTE You can also search for templates on Office.com from within Access. In the **Search Office.com for templates** box, type one or more search terms, and then click the arrow button to search.

3. Optionally, click the folder icon next to the **File Name** box to browse to a location where you want to create the database. If you don't indicate a specific location, Access creates the database in the default location that is displayed below the **File Name** box.
4. Click **Create**.

Access creates the database and opens it for use.

CREATE A DATABASE FROM SCRATCH

If none of the templates fits your needs, or if you have data in another program that you want to use in Access, you may decide that it is better to create a database from scratch. In Access 2010, you have a choice: a standard desktop database, or a web database.

To create a new database, do the following:

1. Start Access.
2. On the **New** tab in Backstage view, click **Blank Database** or **Blank Web Database**.

IMPORTANT The choice that you make here will determine what features are available in the database. Desktop databases cannot be published to the Web, and web databases do not support some desktop features, such as totals queries.

3. On the right, type a name for your database in the **File Name** box.

To change the location in which you create the file, click **Browse**  next to the **File Name** box, browse to and select the new location, and then click **OK**.

4. Click **Create**.

Access creates the database, and then opens an empty table (named Table1) in Datasheet view.

5. Access puts the cursor in the first empty cell in the **Click to Add** column of the new table.

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To add data, begin typing — or you can paste data from another source, as described in the section Paste data from another source into an Access table, later in this article.

- Entering data in Datasheet view is designed to be very similar to entering data in an Excel worksheet. The main restriction is that data must be entered in contiguous rows and columns, starting at the upper-left corner of the datasheet. You should not try to format your data by including blank rows or columns as you might do in an Excel worksheet, because doing so will waste space in your table. The table merely contains your data. All visual presentation of that data will be done in the forms and reports that you design later.
- The table structure is created while you enter data. Any time that you add a new column to the datasheet, a new field is defined in the table. Access sets the data type of the field based on the type of data that you enter. For example, if you have a column in which you have entered only date values, Access will set the data type of that field to Date/Time. If you later attempt to enter a non-date value (such as a name or a phone number) in that field, Access displays a message informing you that the value does not match the data type of the column. When possible, you should plan your table so that each column contains the same type of data, whether it is text, dates, numbers, or some other type. This makes it much easier to build queries, forms, and reports that select just the data that you want.

If you do not want to enter data yet, click **Close** .

NOTE Access will delete Table1 if you close it without saving.

OPEN AN EXISTING ACCESS DATABASE

TIP To quickly open one of the last several databases that you had open, on the **File** tab, click **Recent**, and then click the file name.

1. On the **File** tab, click **Open**.
2. Click a shortcut in the **Open** dialog box — or, in the **Look in** box, click the drive or folder that contains the database that you want.
3. In the folder list, double-click folders until you open the folder that contains the database.
4. When you find the database, do one of the following:
 - To open the database in default open mode, double-click it.
 - To open the database for shared access in a multiuser environment, so that both you and other users can both read and write to the database at the same time, click **Open**.
 - To open the database for read-only access, so that you can view it but cannot edit it, click the arrow next to the **Open** button, and then click **Open Read-Only**.
 - To open the database for exclusive access, so that no one else can open it while you have it open, click the arrow next to the **Open** button, and then click **Open Exclusive**.
 - To open the database for read-only access, click the arrow next to the **Open** button, and then click **Open Exclusive Read-Only** Other users can still open the database, but they only have read-only access.

If you can't find the database that you want to open

1. In the **Open** dialog box, click the **My Computer** shortcut — or, in the **Look in** box, click **My Computer**.
2. In the list of drives, right-click the drive that you think might contain the database, and then click **Search**.
3. Enter your search criteria, and then press ENTER to search for the database.
4. If the database is found, open it by double-clicking it in the **Search Results** dialog box.

NOTE Because the search was initiated from the **Open** dialog box, you must click **Cancel** in that dialog box before the database will open.

You can directly open a data file in an external file format (such as dBASE, Paradox, Microsoft Exchange, or Excel). You can also directly open any ODBC data source, such as Microsoft SQL Server or Microsoft FoxPro. Access automatically creates a new Access database in the same folder as the data file, and adds links to each table in the external database.

GET STARTED USING YOUR NEW DATABASE

Depending on the template that you used, you might need to do one or more of the following to get started with the new database:

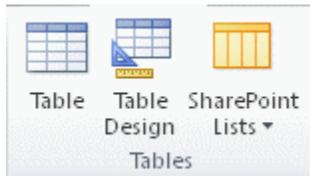
- If Access displays a **Login** dialog box with an empty list of users, use the following procedure to get started:
 1. Click **New User**.
 2. Fill in the **User Details** form.
 3. Click **Save & Close**.
 4. Select the user name you just entered, and then click **Login**.
- If Access displays an empty datasheet, you can begin typing data directly into that datasheet, or click other buttons and tabs to explore the database.
- If Access displays a **Getting Started** page, you can click links on that page to learn more about the database, or click other buttons and tabs to explore the database.
- If Access displays a **Security Warning** message in the message bar, and you trust the source of the template, click **Enable Content**. If the database requires a login, you will need to log in again.

For desktop and web databases, you also want to begin with one of these steps:

- Add a table and then input data into the table.
- Import data from other sources, creating new tables in the process.

ADD A TABLE

You can add a new table to an existing database by using the tools in the **Tables** group on the **Create** tab.



NOTE In a web database, only the **Table** command is available in the **Tables** group.

Regardless of which view you start in, you can always switch to the other view by using the view buttons on the status bar of the Access window.

Create a blank table in Datasheet view In Datasheet view, you can enter data immediately, and let Access build the table structure behind the scenes. Field names are assigned numerically (Field1, Field2, and so on), and Access sets the field data type, based on the type of data that you enter.

1. On the **Create** tab, in the **Tables** group, click **Table** .
 2. Access creates the table, and then places the cursor in the first empty cell in the **Click to Add** column.
 3. To add data, begin typing in the first empty cell — or you can paste data from another source, as described later in this article.
- To rename a column (field), double-click the column heading, and then type the new name.

TIP Give a meaningful name to each field, so that you can tell what it contains without having to look at the data.

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- To move a column, select it by clicking its column heading, and then drag it to where you want it. You can also select several contiguous columns and drag them all to a new location together.

To add more fields to your table, you can either begin typing in the **Click to Add** column in Datasheet view, or you can add new fields by using the commands in the **Add & Delete** group on the **Fields** tab.

Create a table starting in Design view In Design view, you first create the new table's structure. Then you either switch to Datasheet view to enter data, or you enter your data by using some other method, such as with a form.

NOTE Design view is not available for tables in a web database.

1. On the **Create** tab, in the **Tables** group, click **Table Design**. 
2. For each field in your table, type a name in the **Field Name** column, and then select a data type from the **Data Type** list.
3. You can enter additional information for each field in the **Description** column. The description that you enter is displayed in the status bar when the insertion point is in that field, and is used as the status bar text for any controls that you create by dragging the field from the **Field List** pane to a form or report, and for any controls that are created for that field by the Form Wizard or Report Wizard.
4. After you have added all of your fields, save the table:
 - On the **File** tab, click **Save**.
5. You can begin entering data into the table at any time by switching to Datasheet view, clicking in the first empty cell, and typing. You can also paste data from another source, as described in the next section.

PASTE DATA FROM ANOTHER SOURCE INTO AN ACCESS TABLE

If your data is currently stored in another program, such as Excel, you can copy and paste your data into an Access table. In general, this works best if your data is already separated into columns, as they are in an Excel worksheet. If your data is in a word processing program, you should first separate the columns of data by using tabs, or convert the data into a table in the word processing program, and then copy the data. If your data needs any editing or manipulation (for example, separating full names into first and last names), you might want to do this before you copy the data, particularly if you are not familiar with Access.

When you paste data into an empty table, Access sets the data type of each field according to what kind of data it finds there. For example, if a pasted field contains nothing but date values, Access applies the Date/Time data type to that field. If the pasted field contains only the words "yes" and "no", Access applies the Yes/No data type to the field. Access names the fields depending on what it finds in the first row of pasted data. If the first row of pasted data is similar in type to the rows that follow, Access determines that the first row is part of the data and assigns the fields generic names (Field1, Field2, and so on). If the first row of pasted data is not similar to the rows that follow, Access uses the first row as field names, and excludes the first row in the actual data. If Access assigns generic field names, you should rename the fields as soon as possible to avoid confusion. Use the following procedure:

1. On the **File** tab, click **Save** to save the table.
2. In Datasheet view, double-click each column heading, and then type a name for the column.
3. Save the table again.

IMPORT OR LINK TO DATA FROM ANOTHER SOURCE

You might have data that you've been collecting in another program that you would like to use in Access. Perhaps you work with people who store their data in other programs, and you want to work with their data in Access. Or, maybe you have multiple disparate sources of data, and need a "landing pad" where you can bring them all together for deeper analysis.

Access makes it easy to import or link data from other programs. You can bring in data from an Excel worksheet, from a table in another Access database, from a SharePoint list, or from any of a variety of other sources. The process differs slightly depending on the data source, but these instructions will get you started:

1. On the **External Data** tab, in the **Import & Link** group, click the command for the type of file that you are importing from.

For example, if you are importing data from an Excel worksheet, click **Excel**. If you don't see the correct program type, click **More**.

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NOTE If you can't find the correct format type in the **Import & Link** group, you may need to start the program in which you originally created the data, and then use that program to save the data in a file format that Access supports (such as a delimited text file), and then import or link to the data.

2. In the **Get External Data** dialog box, either click **Browse** to browse to the source data file, or type the full path of the source data file in the **File name** box.
3. Click the option that you want under **Specify how and where you want to store the data in the current database**. You can create a new table by using the imported data, or create a linked table that maintains a link to the data source.
4. Click **OK**.

Depending on your choice, the **Link Objects** dialog box or the **Import Objects** dialog box opens.

5. Use the dialog box to finish the process. The exact procedure you follow depends on the import or link option that you chose.
6. On the last page of the wizard, click **Finish**.

If you chose to import, Access asks whether you want to save the details of the import operation that you just completed.

7. If you think that you will be performing this same import operation again, click **Save import steps**, and then enter the details.

You can then easily reproduce the import operation by clicking **Saved Imports** in the **Import** group on the **External Data** tab, clicking the import specification, and then clicking **Run**.

8. If you don't want to save the details of the operation, click **Close**.

Access imports the data into a new table, and then displays the table under **Tables** in the Navigation Pane.

IMPORT DATA FROM A SPREADSHEET OR OTHER PROGRAM

If you are familiar with other database or spreadsheet programs, you probably know the basics of how these applications work and what databases are used for. Access differs from many other database applications by allowing you to create relational databases, and it further differs from most spreadsheet programs by offering tools for developing sophisticated queries, forms, and reports. Access also provides many options for working with other database programs, such as SQL Server.

Import an Excel worksheet into Access

Many people begin to explore Access after first building a list in Excel. Excel is a great place to start a list, but as the list grows, it becomes harder to organize and keep updated. Moving the list to Access is usually the next logical step.

A database table is similar in structure to a worksheet, in that data is stored in rows and columns. As a result, it is usually easy to import a worksheet into a database table. The main difference between storing your data in a worksheet and storing it in a database is in how the data is organized. Simply importing your entire worksheet as a new table in a database will not solve the problems associated with organizing and updating your data, particularly if your worksheet contains redundant data. To solve those problems, you must split the spreadsheet data into separate tables, each one containing related data.

Import an Excel worksheet as a table in a new database

1. On the **File** tab, click **New**, and then click **Blank Database**.
2. Type a name for the new database in the **File Name** box, and then click **Create**.

The new database opens, and Access creates a new empty table, Table1.

3. Close Table1.

When asked if you want to save changes to the design of Table1, click **No**.



4. On the **External Data** tab, in the **Import & Link** group, click **Excel**.
5. In the **Get External Data** dialog box, click **Browse**.
6. Use the **File Open** dialog box to locate your file.
7. Select the file, and then click **Open**.
8. In the **Get External Data** dialog box, ensure that the **Import the source data into a new table in the current database** option is selected.
9. Click **OK**.

The Import Spreadsheet Wizard starts, and asks you a few questions about your data.

10. Follow the instructions, clicking **Next** or **Back** to navigate through the pages. On the last page of the wizard, click **Finish**.

NOTE Access asks whether you want to save the details of the import operation that you just completed. If you think that you will be performing this same import operation again, click **Yes**, and then enter the details. You can then easily reproduce the operation in the future by clicking **Saved Imports** in the **Import** group on the **External Data** tab. If you don't want to save the details of the operation, click **Close**.

Access imports the data into a new table, and then displays it under **All Tables** in the Navigation Pane.

Use the Table Analyzer Wizard to organize your data

After your data has been imported into an Access table, you can use the Table Analyzer Wizard to quickly identify redundant data. The wizard then provides a simple way to organize the data into separate tables, so that it is stored in the most efficient way. Access preserves the original table as a backup, and then creates new tables that you can use as the basis for your database application.

1. Open the Access database that contains the table that you want to analyze.
2. On the **Database Tools** tab, in the **Analyze** group, click **Analyze Table**.

The Table Analyzer Wizard starts.

The first two pages of the wizard contain a short tutorial — complete with buttons that you can click to see examples. If you don't see the introductory pages, but instead see a check box labeled **Show introductory pages?**, select the check box, and then click **Back** twice to see the introduction. If you don't want to see the introductory pages again after reading the introduction, you can clear the **Show introductory pages?** check box.

3. On the **Which table contains fields with values that are repeated in many records?** page, select the table that you want to analyze, and then click **Next**.
4. You can let the wizard decide which fields go in which tables, or you can make that decision yourself. If you follow the wizard's suggestions, you can still make changes to the table layout on the next page of the wizard.

NOTE If you let the wizard decide which fields to put in which tables, its choices may not always be appropriate for your data, especially if there is not much data to work with. You should check the wizard's results carefully. On the other hand, the wizard may suggest a more efficient organization than the one that you are thinking of, so it is a good idea to at least try the wizard's decisions once. If you don't like the suggestions, you can still rearrange the fields manually, and you can always click **Back** and arrange all of the fields yourself.

5. Click **Next**. On this page, you specify which tables contain which fields. If you chose to let the wizard decide, you should see multiple tables connected by relationship lines. Otherwise, Access creates only one table containing all of the fields. In either case, you can make changes on this page.
 - You can drag fields from a table to a blank area of the page to create a new table that contains those fields. Access prompts you for a table name.
 - You can drag fields from one table to another table if you think that they will be stored more efficiently there.
 - Most tables will be given an **ID** or a **Generated Unique ID** field. To learn more about the ID fields, click **Tips** in the upper-right corner of the wizard.
 - To undo a change, click the **Undo** button.
 - To rename a table, double-click its title bar, type the new name, and then click **OK**.

6. After you have the fields arranged the way that you want them, click **Next**.
7. If the wizard finds records that have very similar values, it will identify those values as possible typographical errors and present a screen where you can confirm what to do about them. Scroll through the list to find any that have values in the **Correction** column, and then click the appropriate item in the drop-down list. Select **(Leave as-is)** to keep the wizard from making any changes to the value. When you are finished, click **Next**.
8. The wizard asks whether you want to create a query that resembles your original table. If you have already built forms and reports that are based on the original table, creating such a query is a good idea. If you choose **Yes, create the query**, the wizard renames the original table by appending "_OLD" to the table name, and then names the new query by using the name of the original table. The forms and reports that were based on the table now use the query for their data, and they continue to work as before.
9. Click **Finish**.

The wizard creates the new tables as specified, and then opens them. Close them when you are finished inspecting the results.

Work with data from other programs

Access 2010 provides features for working with data that is stored in other programs.

Create a new Access database that links to data in another file format You can use Access to open a file in another file format such as text, dBASE, or a spreadsheet. Access automatically creates an Access database and links the file for you.

1. Start Access.
2. On the **File** tab, click **Open**.
3. In the **Open** dialog box, click the type of the file that you want to open in the list. If you're not sure of the file type, click **All Files (*.*)**.
4. If needed, browse to the folder containing the file that you want to open. When you find the file, double-click it to open it.
5. Follow the instructions in the wizard. On the last page of the wizard, click **Finish**.

Import or link data to an existing Access database You can either import data from other sources and programs into Access tables so that the data is contained within the Access file, or you can link to the data from Access so that the data remains in the original file (outside of the Access file).

1. On the **External Data** tab, in the **Import & Link** group, click the format in which the data is stored.

You can import or link to data from the following sources:

- **Excel** You can bring in data from a worksheet or a named range in an Excel workbook. Each worksheet or named range must be imported or linked separately.
- **Access** This is very handy for separating your process from your data, creating a split database. That is, you can use one database to contain all your forms, reports, and macros, and keep your data in another database. You can then develop improvements without interrupting anyone's work. You can also combine data from many different Access databases in one, making it easier to summarize data across departments or between business partners.
- **ODBC database** Many programs support this format, including many database server products. This helps you create "landing pad" databases, where you combine data from different systems.
- **Text file** You can connect to a simple text file, and can even use Access to change the contents of that file. This can help make Access data easy to consume by a wide range of programs.
- **XML file** This format also offers compatibility with a variety of other programs, including some web servers.
- **SharePoint list** This makes your data usable with a web browser, the standard way to use a SharePoint list.
- **Data Services** You can connect to web data services inside your enterprise.
- **HTML document**
- **Outlook folder** You can connect to Outlook folders, so you more easily integrate your contact information with the rest of your data.
- **dBase file** dBase is a popular alternative database system that is supported by Access

The **Get External Data** dialog box appears.

2. Follow the instructions in the dialog box.

Access will import or link the data to your database. For most formats, you must specify the location of the data, and then choose how you want the data to be stored in your database.

FORMS

Introduction to forms

A form is a database object that you can use to create a user interface for a database application. A "bound" form is one that is directly connected to a data source such as a table or query, and can be used to enter, edit, or display data from that data source. Alternatively, you can create an "unbound" form that does not link directly to a data source, but which still contains command buttons, labels, or other controls that you need to operate your application.

CREATE A FORM BY USING THE FORM TOOL

You can use the Form tool to create a form with a single mouse-click. When you use this tool, all the fields from the underlying data source are placed on the form. You can start using the new form immediately, or you can modify it in Layout view or Design view to better suit your needs.

Use the Form tool to create a new form

1. In the Navigation Pane, click the table or query that contains the data you want to see on your form.
2. On the **Create** tab, in the **Forms** group, click **Form**.

Access creates the form and displays it in Layout view. In Layout view, you can make design changes to the form while it is displaying data. For example, you can adjust the size of the text boxes to fit the data, if necessary.

If Access finds a single table that has a one-to-many relationship with the table or query that you used to create the form, Access adds a datasheet to the form that is based on the related table or query. For example, if you create a simple form that is based on the Employees table, and there is a one-to-many relationship that is defined between the Employees table and Orders table, the datasheet displays all the records in the Orders table that relate to the current Employee record. You can delete the datasheet from the form if you decide you do not need it. If there is more than one table with a one-to-many relationship to the table that you used to create the form, Access does not add any datasheets to the form.

CREATE A SPLIT FORM BY USING THE SPLIT FORM TOOL

NOTE You can add a split form to a Web database, but you cannot run the form unless you open the Web database by using Access (in other words, it will not run in a Web browser). For more information about Web databases, see the article [Build a database to share on the Web](#).

A split form gives you two views of the data at the same time — a Form view and a Datasheet view.

A split form differs from a form/subform combination in that the two views are connected to the same data source and are synchronized with one another at all times. Selecting a field in one part of the form selects the same field in the other part of the form. You can add, edit, or delete data from either part (as long as the record source is updatable, and you have not configured the form to prevent these actions).

Working with split forms gives you the benefits of both kinds of forms in a single form. For example, you can use the datasheet portion of the form to quickly locate a record, and then use the form portion to view or edit the record.

To create a split form by using the Split Form tool:

1. In the Navigation Pane, click the table or query that contains the data that you want on your form. Or open the table or query in Datasheet view.
2. On the **Create** tab, in the **Forms** group, click **More Forms**, and then click **Split Form**.

Access creates the form and displays it in Layout view. In Layout view, you can make design changes to the form while it is displaying data. For example, you can adjust the size of the text boxes to fit the data, if necessary. For more information about form views, see the Understand Layout view and Design view section.

CREATE A FORM THAT DISPLAYS MULTIPLE RECORDS BY USING THE MULTIPLE ITEMS TOOL

When you create a form by using the Form tool, the form that Access creates displays a single record at a time. If you want a form that displays multiple records but is more customizable than a datasheet, you can use the Multiple Items tool.

1. In the Navigation Pane, click the table or query that contains the data you want to see on your form.
2. On the **Create** tab, in the **Forms** group, click **More Forms**, and then click **Multiple Items**.

Access creates the form and displays it in Layout view. In Layout view, you can make design changes to the form while it is displaying data. For example, you can adjust the size of the text boxes to fit the data. For more information about form views, see the Understand Layout view and Design view section.

When you use the Multiple Items tool, the form that Access creates resembles a datasheet. The data is arranged in rows and columns, and you see more than one record at a time. However, a Multiple Items form gives you more customization options than a datasheet, such as the ability to add graphical elements, buttons, and other controls. For more information about customizing your form, see the sections Fine-tune your form in Layout view and Fine-tune your form in Design view.

CREATE A FORM BY USING THE FORM WIZARD

To be more selective about what fields appear on your form, you can use the Form Wizard instead of the various form-building tools previously mentioned. You can also define how the data is grouped and sorted, and you can use fields from more than one table or query, as long as you specified the relationships between the tables and queries beforehand. For more information about how to create relationships, see the links in the **See Also** section of this article.

1. On the **Create** tab, in the **Forms** group, click **Form Wizard**.
2. Follow the directions on the pages of the Form Wizard.

NOTE If you want to include fields from multiple tables and queries on your form, do not click **Next** or **Finish** after you select the fields from the first table or query on the first page of the Form Wizard. Instead, repeat the steps to select a table or query, and click any additional fields that you want to include on the form. Then click **Next** or **Finish** to continue.

3. On the last page of the wizard, click **Finish**.

Create a form by using the Blank Form tool

If the wizard or the form-building tools don't meet your needs, you can use the Blank Form tool to build a form. This can be a very quick way to build a form, especially if you plan to put only a few fields on your form.

1. On the **Create** tab, in the **Forms** group, click **Blank Form**.

Access opens a blank form in Layout view, and displays the **Field List** pane.

2. In the **Field List** pane, click the plus sign (+) next to the table or tables that contain the fields that you want to see on the form.
3. To add a field to the form, double-click it or drag it onto the form.

NOTES

- After the first field has been added, you can add several fields at once by holding down the CTRL key, clicking several fields, and then dragging them onto the form at the same time.

- The order of the tables in the **Field List** pane can change, depending on which part of the form is currently selected. If the field you want to add is not visible, try selecting a different part of the form and then try adding the field again.
4. Use the tools in the **Header/Footer** group on the **Design** tab to add a logo, title, or the date and time to the form.
 5. Use the tools in the **Controls** group of the **Design** tab to add a wider variety of controls to the form.

For a slightly larger selection of controls, switch to Design view by right-clicking the form and then clicking **Design View**.

Controls that you add while in Design view might not be compatible with the Publish to Web feature. If you plan to publish the form to the Web, you must use only the features that are available in Layout view.

Understand Layout view and Design view

Layout view Layout view is the most intuitive view to use for form modification, and it can be used for almost all the changes that you would want to make to a form in Access. If you create a database by clicking **Blank Web Database** in Microsoft Backstage View, then Layout view is the only view that is available for designing forms.

In Layout view, the form is actually running. Therefore, you can see your data much as it will appear when you are using the form. However, you can also change the form design in this view. Because you can see the data while you are modifying the form, this is a very useful view for setting the size of controls or performing almost any other task that affects the appearance and usability of the form.

If you are creating a standard desktop database (as opposed to a Web database), and you encounter a task that cannot be performed in Layout view, you can switch to Design view. In certain situations, Access displays a message that states that you must switch to Design view before you can make a particular change.

Design view Design view gives you a more detailed view of the structure of your form. You can see the Header, Detail, and Footer sections for the form. The form is not actually running when it is shown in Design view. Therefore, you cannot see the underlying data while you are making design changes. However, there are certain tasks that you can perform more easily in Design view than in Layout view. You can:

- Add a wider variety of controls to your form, such as bound object frames, page breaks, and charts.
- Edit text box control sources in the text boxes themselves, without using the property sheet.
- Resize form sections, such as the Form Header or the Detail section.
- Change certain form properties that cannot be changed in Layout view.

QUERIES

OPEN AN EXISTING QUERY

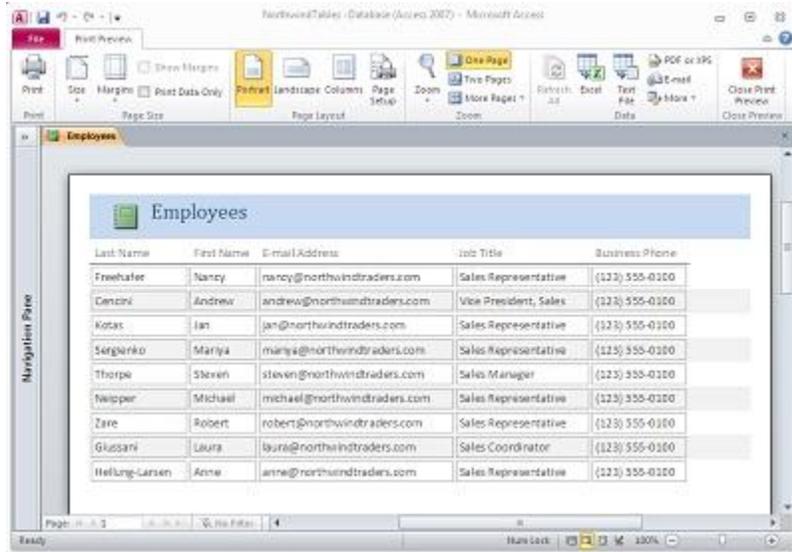
If you are not familiar with the Navigation Pane, you may not know how to open a query that already exists. The Navigation Pane is a feature that replaces the Database Window from versions prior to Access 2007. You'll see the Navigation Pane along the left side of your screen.

To open any database object, including a query, you can double-click the object in the Navigation Pane.

- **Microsoft offers an excellent self-paced online training module that covers this topic available at <http://office.microsoft.com/en-us/access-help/create-queries-for-a-new-database-RZ101772999.aspx>*

REPORTS

A report is a database object that you use to display and summarize data. Reports provide a way to distribute or archive snapshots of your data, either by being printed out, converted to PDF or XPS files, or exported to other file formats.



PARTS OF A REPORT

In Access, the design of a report is divided into sections. In a client database, you can view your report in Design view to see its sections. In Layout view, the sections are not as obvious, but they are still there, and can be selected by using the drop-down list in the **Selection** group on the **Format** tab. To create useful reports, you need to understand how each section works. For example, the section in which you choose to place a calculated control determines how Access calculates the results. The following list is a summary of the section types and their uses:

- **Report Header** This section is printed just once, at the beginning of the report. Use the report header for information that might normally appear on a cover page, such as a logo, a title, or a date. When you place a calculated control that uses the Sum aggregate function in the report header, the sum calculated is for the entire report. The report header is printed before the page header.
- **Page Header** This section is printed at the top of every page. For example, use a page header to repeat the report title on every page.
- **Group Header** This section is printed at the beginning of each new group of records. Use the group header to print the group name. For example, in a report that is grouped by product, use the group header to print the product name. When you place a calculated control that uses the Sum aggregate function in the group header, the sum is for the current group. You can have multiple group header sections on a report, depending on how many grouping levels you have added. For more information about creating group headers and footers, see the section Add grouping, sorting, or totals.
- **Detail** This section is printed once for every row in the record source. This is where you place the controls that make up the main body of the report.
- **Group Footer** This section is printed at the end of each group of records. Use a group footer to print summary information for a group. You can have multiple group footer sections on a report, depending on how many grouping levels you have added.
- **Page Footer** This section is printed at the end of every page. Use a page footer to print page numbers or per-page information.
- **Report Footer** This section is printed just once, at the end of the report. Use the report footer to print report totals or other summary information for the entire report.

NOTE In Design view, the report footer appears below the page footer. However, in all other views (Layout view, for example, or when the report is printed or previewed), the report footer appears *above* the page footer, just after the last group footer or detail line on the final page.

CREATE A NEW REPORT

Step 1: Choose a record source

The record source of a report can be a table, a named query, or an embedded query. The record source must contain all of the rows and columns of data you want display on the report.

- If the data you want is contained in an existing table or query, select the table or query in the Navigation Pane, and then continue to Step 2: Choose a report tool.
- If the record source does not yet exist, do one of the following:
 - Continue to Step 2: Choose a report tool and use the **Blank Report** tool, or
 - Create the table(s) or query that contains the data you want to use, select it in the Navigation Pane, and then continue to Step 2: Choose a report tool.

Step 2: Choose a report tool

The report tools are located on the **Create** tab of the ribbon, in the **Reports** group. The following table briefly describes what each tool does:

Web-compatible reports

Reports created by using these tools are compatible with the Publish to Access Services feature, and will render in a browser. Note that Web compatible objects are indicated by the globe on the object's icon.

BUTTON IMAGE	TOOL	DESCRIPTION
	Report	Creates a simple, tabular report containing all of the fields in the record source you selected in the Navigation Pane.
	Blank Report	Opens a blank report in Layout view, and displays the Field List task pane. Access creates a record source query as you drag fields from the Field List to the report.

Client reports

Reports created by using these tools are not compatible with the Publish to Access Services feature. Adding client reports to a Web database will not prevent the database from publishing, but the client reports will not be available in the browser. However, you can use a client report when the database is open in Access.

BUTTON IMAGE	TOOL	DESCRIPTION
	Report	Creates a simple, tabular report containing all of the fields in the record source you selected in the Navigation Pane.
	Report Design	Opens a blank report in Design view, to which you can add just the fields and controls you want.
	Blank Report	Opens a blank report in Layout view, and displays the Field List task pane. As you drag fields from the Field List to the report, Access creates an embedded query and stores it in the Record Source property of the report.



Report Wizard Displays a multiple-step wizard that lets you specify fields, grouping/sorting levels, and layout options. The wizard creates a report based on the selections you make.



Labels Displays a wizard that lets you select standard or custom label sizes, as well as which fields you want to display, and how you want them sorted. The wizard creates the label report based on the selections you make.

Step 3: Create the report

1. Click the button for the tool you want to use. If a wizard appears, follow the steps in the wizard and click **Finish** on the last page.

Access displays the report in Layout view.

2. Format the report until it looks the way you want:
 - Resize fields and labels by selecting them and then dragging the edges until they are the size you want.
 - Move a field by selecting it (and its label, if present), and then dragging it to the new location.
 - Right-click a field and use the commands on the shortcut menu to merge or split cells, delete or select fields, and perform other formatting tasks.

ADD GROUPING, SORTING, OR TOTALS

The fastest way to add grouping, sorting, or totals to a report is to right-click the field to which you want to apply the group, sort, or total, and then click the desired command on the shortcut menu.

You can also add grouping, sorting, or totals by using the Group, Sort, and Total pane while the report is open in Layout view or Design view:

1. If the Group, Sort, and Total pane is not already open, on the **Design** tab, in the **Grouping and Totals** group, click **Group & Sort**.
2. Click **Add a group** or **Add a sort**, and then select the field on which you want to group or sort.
3. Click **More** on a grouping or sorting line to set more options and to add totals.

HIGHLIGHT VALUES BY USING CONDITIONAL FORMATTING

To add conditional formatting:

1. Open the report in Layout view by right-clicking the report in the Navigation Pane and then clicking **Layout View**.
2. Select all of the controls to which you want to apply the conditional formatting. To select multiple controls, hold down the SHIFT or CTRL key and click the controls you want.
3. On the **Format** tab, in the **Control Formatting** group, click **Conditional Formatting**.

Access opens the **Conditional Formatting Rules Manager** dialog box.

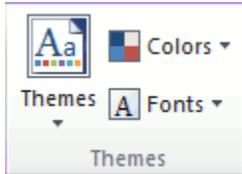
4. In the **Conditional Formatting Rules Manager** dialog box, click **New Rule**.
5. In the **New Formatting Rule** dialog box, select a value under **Select a rule type**:
 - To create a rule that is evaluated for each record individually, select **Check values in the current record or use an expression**.
 - To create a rule that compares records to each other by using data bars, click **Compare to other records**.
6. Under **Edit the rule description**, specify the rule that will determine when the formatting should be applied, as well as the formatting that you want when the rule's criteria are met.
7. Click **OK** to return to the **Conditional Formatting Rules Manager** dialog box.
8. To create an additional rule for this control or set of controls, repeat this procedure from step 4. Otherwise, click **OK** to close the dialog box.
- 9.

GET A PROFESSIONAL LOOK WITH THEMES

You can now apply Office 2010 Themes to an Access database, helping you to create a consistent style across all your Office documents.

IMPORTANT If you choose an Office Theme, font, or color, it is applied to all the forms and reports in your database (not just the one you are working on).

1. Open a report in Layout view by right-clicking it in the Navigation Pane and then clicking **Layout View**.
2. On the **Design** tab, in the **Themes** group, select the Theme, color or font that you want:



- Use the **Theme** gallery to simultaneously set colors and fonts to a pre-designed scheme.
- Use the **Colors** or **Fonts** galleries to set colors or fonts independently.

ADD IMAGES

1. In the Navigation Pane, right-click the report to which you want to add the image, and then click **Layout View**.
2. Click on the report where you want to add the image.
3. On the **Design** tab, in the **Controls** group, click **Insert Image**.
4. Do one of the following:

- **Use an existing image** If the image you want is already in the gallery, click it to add it to the report.
- **Upload a new image** At the bottom of the gallery, click **Browse**. In the **Insert Picture** dialog box, navigate to the image you want to use, and then click **Open**.

Access adds the selected image to the report.

Add a background image

NOTE Background images cannot be added to Web-compatible reports.

1. In the Navigation Pane, right-click the report to which you want to add the background image, and then click **Layout View**.
2. On the **Format** tab, in the **Background** group, click **Background Image**.
3. Do one of the following:

- **Use an existing image** If the image you want is already in the gallery, click it to add it to the report.
- **Upload a new image** At the bottom of the gallery, click **Browse**. In the **Insert Picture** dialog box, navigate to the image you want to use, and then click **Open**.

Access adds the selected image to the report.

PREVIEW AND PRINT A REPORT

Preview a report

1. Open the report you want to preview, or just select it in the Navigation Pane.
2. On the **File** tab, click **Print**, and then click **Print Preview**.

Access opens the report in Print Preview. You can use the commands on the **Print Preview** tab to do any of the following:

- Print the report;
 - Adjust page size or layout;
 - Zoom in or out, or view multiple pages at a time;
 - Refresh the data on the report;
 - Export the report to another file format.
3. To return to the database workspace, on the **Print Preview** tab, in the **Close Preview** group, click **Close Print Preview**.

Print a report

In addition to printing from Print Preview, you can also print a report without previewing:

1. Open the report you want to preview, or just select it in the Navigation Pane.
 2. On the **File** tab, click **Print**.
- To send the report directly to the default printer without setting printer options, click **Quick Print**.
 - To open a dialog box where you can select a printer, specify the number of copies, and so on, click **Print**.

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