Working with Database Applications

Database applications store data in tables made up of rows and columns, similar to worksheets in spreadsheet applications. Just as one workbook in a spreadsheet application may contain many worksheets, one database may contain many tables. In database terminology, rows contain *records* and columns contain *fields*.

A *record* is all the information in a database that pertains to one person, place, or thing. In a survey database, each record contains the data collected from one respondent. A *field* is one distinct item of information in each of the records. In a survey database, each field contains an answer provided by a respondent to one question.

Database applications have a *graphical user interface* (GUI). A database GUI is very similar to the GUIs in applications you have probably used more frequently, such as word processing and spreadsheet applications. The interface provides menus that list the actions a user can take. The GUI also provides icons that represent commands on the menus. Icons are grouped together in toolbars.

Database Table Menus

File. The File menu contains commands for managing database files. You can use it to create new databases or open existing databases. You can save changes in the database and save changes in a database file with a new name. You can also close a database without saving changes. You can set options for printing and print the data table. You can also exit the database application.

View. The View menu controls how the graphical user interface looks. You can use it to control which toolbars are visible. The main purpose of the View menu in a database application is to choose between two ways of viewing a table. First, datasheet view displays the table itself with the data it contains. Second, design view displays a list of the fields used in the table along with the properties of each field.

Format. The Format menu controls how the table looks. You can change how gridlines are displayed or choose not to display gridlines. You can format rows and columns by changing height and width or even hiding them from view. You can also use the Format menu to change the font, color, and effects of all text in the table. Unlike other applications, you usually cannot apply formatting only to one data item or even to one record or field. Tables specialize in storing data, while other database objects provide more formatting options.

Microsoft Access - [Table1 : Table]

File   Edit   View   Insert   Format   Records   Tools   Window   Help

Records. The Records menu is one feature that database applications do not share with the GUIs of other types of applications. You can use the Records menu to sort and filter data based on the values in any field.

Edit. The Edit menu contains commands for managing data. You can use it to cut, copy, and paste data. You can delete data and select or delete whole records and fields. If you need to find a particular data item, you can use the Edit menu to find it. You can also replace particular text with other text wherever it appears in the table. The Edit menu also allows you to undo and redo your changes.
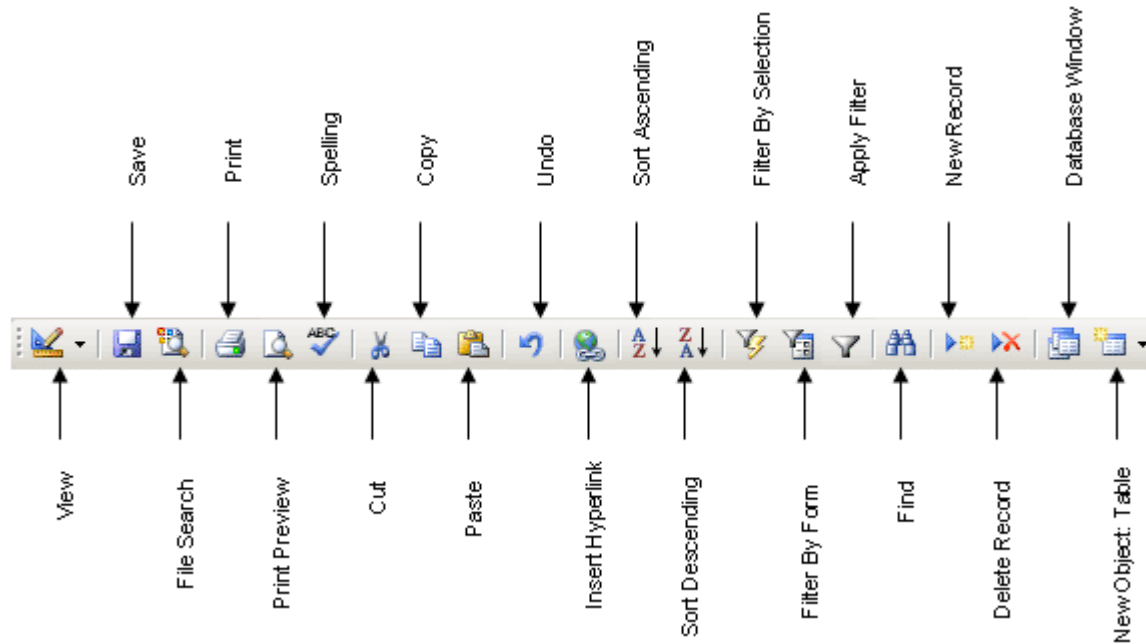
Insert. The Insert menu contains commands for adding many elements to a spreadsheet. You can insert a row, column, or cell at a specific point. You can insert a function to perform a calculation on data. You can insert a chart to represent data visually. You can insert hyperlinks to Web sites. You can even insert multimedia objects, such as images, sounds, and video.

Tools. The Tools menu contains some advanced commands. One option on the Tools menu that you should use often is the spelling check.

Using the Toolbar

The icons for commonly used options on different menus are gathered together on the Database toolbar. The advantage of the toolbar is that you can select a menu option with one click. You do not have to open a menu first and then select an option.

The Database toolbar allows you to start a new database file, open an existing database, and save changes to a database file. You can preview how a database object looks when printed and print the object. You can also cut, copy, and paste data from the toolbar.