Microsoft Access
Databases: What they are and how they work

A database is a collection of information related to a particular subject or purpose, such as tracking customer orders or maintaining a music collection. If your database isn't stored on a computer, or only parts of it are, you may be tracking information from a variety of sources that you have to coordinate and organize yourself.

Using Microsoft Access, you can manage all your information from a single database file. Within the file, divide your data into separate storage containers called tables; view, add, and update table data using online forms; find and retrieve just the data you want using queries; and analyze or print data in a specific layout using reports.

To store your data, create one table for each type of information you track. To bring the data from multiple tables together in a query, form, or report, you define relationships between the tables.

To find and retrieve just the data that meets conditions you specify, including data from multiple tables, create a query. A query can also update or delete multiple records at the same time, and perform built-in or custom calculations on your data.

To easily view, enter, and change data directly in a table, create a form. When you open a form, Microsoft Access retrieves the data from one or more tables and displays it on screen using the layout you chose in the Form Wizard or using a layout that you created from scratch.

To analyze your data or present it a certain way in print, create a report. For example, you might print one report that groups data and calculates totals, and another report with different data formatted for printing mailing labels.

Database Glossary

Database objects: Tables, queries, forms, reports, macros, and modules
Table: The fundamental structure of a relational database management system. In Microsoft Access, a table is an object that stores data in records (rows) and fields (columns). The data is usually about a particular category of things, such as employees or orders.
Field: An element of a table that contains a specific item of information, such as last name. A field is represented by a column or cell in a datasheet. On a form, you can use a control, such as a text box, to display data from a field.
Expression: Any combination of operators, constants, literal values, functions, and names of fields, controls, and properties that evaluates a single value. You can use expressions as settings for many properties and action arguments, to set criteria or define calculated fields in queries, and to set conditions in macros.
Primary key: One or more fields whose value or values uniquely identify each record in a table. In a relationship, a primary key is used to refer to specific records in one table form another table. A primary key is called a foreign key when it is referred to from another table.
Queries: A question about the data stored in your tables, or a request to perform an action on the data. A query can bring together data from multiple tables to use as the source of data for a form or report.
Form: A Microsoft Access database object on which you place controls for taking actions or for entering, displaying, and editing data in fields.
Reports: A Microsoft Access database object that presents information formatted and organized according to your specifications. Examples of reports are sales summaries, phone lists, and mailing labels.
Macro: An action or a set of actions you can use to automate tasks.
Module: A collection of declarations, statements, and procedures stored together as one named unit. Microsoft Access has two types of modules: standard modules and class modules. Form and report modules are class modules containing code that's local to the form or report. Unless explicitly made private to the module in which they appear, procedures in standard modules are recognized and can be called by procedures in other modules in the same database or in referenced databases.