

Glossary

Action query Performs one of four actions on a group of records (delete, update, append, or create a new table)

Aggregate functions Built-in routines used to count, total, and calculate minimum, maximum, and average values, and more

Alias Unique name used when an expression or field is assigned to one or more field names (e.g., two aliases might be used to find the lowest and highest price of a product in a query where both columns are derived from the same Price field but a unique name is required for each calculated column)

Anchored controls Any of nine positions that range from anchoring to the top left to stretching down and right, or that tie form or report controls to other controls so all controls can be positioned as a group

Append query Query that adds a group of records from one or more sources to the end of one or more tables

Atomization The breaking of fields into the smallest single values to improve sorting, reporting, and printing (e.g., instead of a Name field that contains the value of Jay Winchester, atomizing would create two fields—FirstName (Jay) and LastName (Winchester))

AutoNumber data type Field for which Access automatically assigns a unique identifying number to records as they are added to a table; the autonumber cannot be modified or reused in a table, so deleted records result in gaps

Back-end The underlying database tables that support the front-end of a split database; these tables are protected so users cannot modify their structure

Bound control Control that ties form data to table data so the data appears on the form or report (e.g., the LastName text box is bound to the LastName field in the source table)

Calculated control Form or report control that is tied to an expression (e.g., Total = [Price]*[Quantity], where Total is a text box, and Price and Quantity are bound controls)

Can Grow property Allows the subreport space to expand as necessary so more data appears vertically in the subreport

Cartesian product list Displays all combinations and results from a database query that uses fields from unrelated tables; often provides meaningless results

Cascade Delete Relationship that records in a related table whenever related records in the primary table are deleted

Cascade Update Relationship that updates the value in the key field of a related table when the primary key value in the primary table is changed

Cloud storage Online storage used for saving, storing, and backing up files remotely on a web server

Column heading selector Gray bar on the top of a field in the Query Design Grid; allows you to select, delete, and move fields

Command buttons Controls used to create action buttons that can be placed on a form to perform such actions as opening a report, moving to the next record, or even exiting Access

Compacting Compressing a database to remove wasted and unused space left from deleted and edited records or due to fragmentation

Concatenation Combining fields and expressions using the ampersand (&) to join text values from multiple fields (e.g., FirstName&" " &LastName)

Control Object that displays data, text, checkboxes, lines, images, or buttons

Criteria Conditions that selected data must meet when a query is run (e.g., State = "FL" or HireDate >01/01/13)

Crosstab queries List the fields to be grouped on the left side of the datasheet while arranging the fields to be summarized across the top; allow for the calculation of sums, averages, counts, and totals for groups

Data Information such as names, numbers, dates, descriptions, etc. organized for reference or analysis

Data gathering process Obtaining sample copies of every record, form, and report to properly analyze the needs and design the objects required for a new database

Data type Sets the characteristics of a field and identifies the type of values it may hold (alphanumeric text, numbers, dates, yes/no values, hyperlink, etc.)

Database Organized collection of related data files or tables (e.g., a company may have a filing system that includes linked employee, customer, product, and invoice files)

Database Documenter Documents database objects so changes to the database design and relationships can be tracked

Database management software

Allows users to store, manipulate, and retrieve database information

Database splitter Converts a database into two files—one with the tables holding the data that support all other database objects (back-end) and one with the database reports, forms, and queries that use the data (front-end); after splitting, users in a networked environment can design and modify their own database objects without interfering with other users

Datasheet View Displays actual data values

Delete query Query that deletes a group of records from one or more tables

Description Optional field property that may be used in Design View to help identify special information about a field

Design View Where form, query, and report layout is defined; shows field names and labels, and other objects that can be displayed

Detail section Main section of a form or report that contains the text boxes that display data from underlying database tables; detail content varies from record to record

Detail selector button White square in the left corner of the detail bar; click it to activate the Detail section

Entity Relationship Diagram (ERD) Used to model and display relationships between entities, specifically the relationship between tables and fields, as established by key fields

Export The process of sending data to other files or applications

Expression Combination of field names and arithmetic and logical operators required to perform the calculation; an Access formula

Expression Builder Tool for creating formulas and expressions; double-click the desired fields and operands presented

Field Named piece of information about each person, place, or thing; in an Access table, each field is displayed in a column

File synchronization ("synching") Feature of cloud storage that updates files stored at different locations on different devices so you can create a document on your work PC and then later open the exact document on another device (e.g., laptop, tablet, smartphone)

Filter Result of selecting a subset of records in a table, hiding records whose data does not match the specified criteria

Filter by Form Selects records based on values or conditions (criteria) typed into form fields

Filter by Selection Selects records based on value contained in the active table field

Find Duplicates Query Wizard Locates records containing duplicate field values in a table or query

Find Unmatched Query Wizard Locates records in one table that have no related records in another table

Flat file Table that includes all data for a database in a single file, resulting in larger files sizes and an increased likelihood of inconsistent data

Foreign key Field in a secondary table that links to the primary key field in the main table, which contains the detailed information for a particular item

Form Database screen used to enter, edit, and view data for an individual record in a layout that is more convenient and attractive than a table datasheet layout

Form footer Bottom section of a form that appears on the last page of a page form; seldom used

Form header Top section of a form that contains constant information, such as a title, logo, decorative line, or color scheme

Form selector button Black square in the upper-left corner of a form; click it to select the entire form

Form View Provides a user-friendly way to add, edit, and delete table records; does not allow modification of the form's design layout

Fragmented Describes a file that is separated into numerous parts due to incidental data from other applications stored after database records are added, resulting in a noncontiguous file and sluggish performance

Front-end The up-front portion of a split database with which users interact—the queries, forms, and reports that they use or may create and customize

Group Collection of controls or records that have at least one feature in common; quick forms tie all automatically inserted text boxes and corresponding labels into one group, allowing you to move the entire group but not the individual controls; or, if you want to display all vendors with offices in the same state, you could group on the State field

Group By Function that allows you to calculate the running total, minimum, maximum, average, etc. for each group

Group Header Identifies a field (such as EmpID) by which report data is grouped, so a summary (such as a total of each employee's sales) can be displayed for the grouped field

Group Footer Displays the summary for a grouped field, such as the total of each employee's sales, grouped by the EmpID

Hypertext Markup Language (HTML) Code or language in which web pages are written

Index Structure similar to a book index; its main function is to speed up database operations; an index set on key fields uses one or more hidden columns in a table for faster data retrieval

Import The process of retrieving data from other files or applications

Input mask Controls data formats by setting the required characters to display as users enter data, such as slashes (/) for a date field

Join line Connects one key field to another key field in a relationship diagram

Key field Field containing a unique ID that will not be the same for any two database records; e.g., social security number and student ID

Label Part of a control that contains a caption identifying the data displayed in a text box or checkbox; e.g., the caption *Last Name* is a good label for the *LastName* field

Layout View Combines the editing ability of Design View with the layout look of Form/Report View so you can better visualize and modify the form's appearance; does not allow you to add, change, or delete records

Linked file Source file whose contents are placed into a destination file, and that destination data can be automatically updated to correspond to changes made to the source file (if it's not deleted or moved)

Linked Table Manager Aids in redirecting a database to the correct linked file if the file was moved, as in a removed thumb drive or a file moved to a different folder

Macro Object that combines a series of steps into a single step so a more detailed task can be automated with one double-click of the mouse

Make Table query Query that creates a new table from the selected data in one or more tables

Mail Merge Word feature used to personalize standard letters, envelopes, mailing labels, and other documents by combining a main document with a data source

Many-to-many relationship

Relationship where two tables each have matching records in the other table but do not share key fields, so they use a third junction table to tie other tables and complete the relationship; e.g., one vendor provides many different products, and one product is available from many vendors

Navigation form Special form with an interface that displays various forms and reports; created to accommodate databases published to the web

Navigation Pane The Objects Panel that lists existing database objects (specifically, tables, queries, forms, and reports)

Normalization Organizing tables and fields into their smallest distinct parts and then linking the data through key field relationships; eliminates data duplication, decreases data entry errors and inconsistencies, and reduces file size

Object Database structure used to store or reference data

Object Dependencies panel Allows the display of database objects that either use or are used by other objects

One-to-many relationship Most common relationship, where each record in Table A can have multiple matching records in Table B, but a record in Table B can have only one matching record in Table A

One-to-one relationship Least frequently used relationship, where the related fields are primary keys, and each record in Table A can have only one matching record in Table B, while each record in Table B can have only one matching record in Table A

Operators Arithmetic symbols used to perform mathematical operations or compare values, specifically add (+), subtract (-), divide (/), multiply (*), exponential (^) and parenthesis ()

Order of calculations Standard order for performing mathematical operations, where expressions in parenthesis are performed first, followed by exponents, followed by multiplication or division, followed by addition or subtraction, and then in a left-to-right order

Parameter query Query that filter records and returns only a subset that matched the value entered, delivering on-the-fly results

Performance Analyzer Analyzes database performance by reviewing database objects to identify potential errors, data redundancy, and mismatched field definitions; recommends modifications for optimum database efficiency

Primary key Unique ID that cannot be the same for any two records (e.g., a student ID)

Primary sort field First field sorted; a LastName field is typically the primary sort field

Property Field attributes that control features such as format, field size, font size, weight and color; available properties depend on the data type

Property Sheet Panel on the right side of a design window used to set values for controls, such as font size, color, alignment, etc. depending on the type of control

Queries Object used to select, search, sort, and extract table data based on criteria and conditions; displays results in a row and column format

Query design grid Enables you to place desired fields onto columns and provides rows to sort the data or set specific search criteria

Record Collection of details (fields) about an individual person, place, or thing, such as an employee record or a product record

Record locking Use of a small temporary file created whenever an Access file is opened; its extension is .laccdb, where “l” stands for “locked,” indicating that whenever one user edits a record, no other user can edit it until the first user moves on to a new record

Record source Field property that connects text boxes in a form, subform, or report to a field in an underlying table or query

Referential integrity Relationship protocol that maintains the validity of related data; requires that the data types of related primary and foreign key fields are the same or compatible

Relationships Connect data in one table to data stored in other tables through the use of key fields

Relational database Contains two or more linked tables related by unique and identifying key fields (e.g., a ProductID that allows product information to be stored only once in the Products table, yet is available to all linked tables, queries, forms, and reports)

Reports Database pages that present processed and summarized data from tables and queries as meaningful information in an easy-to-read format; designed to be printed

Reserved words Terms with special meanings; cannot be used as field names

Return feature Item on a Query Design tab that enables you to set the number of records to be displayed (returned) in the query results

Rich text fields Text fields that can be formatted with minimal enhancements, such as bold and color

Rich Text File (RTF) Variation of a text file that contains minimal formatting, such as bold and color

Sections The major parts of the form, such as the Form Header, Form Footer, Detail, Page Header, and Page Footer; section bars separate form sections

Secondary sort field Second field sorted when multiple records contain the same data in the primary sort field; FirstName is often a secondary sort field

Select query Database inquiry that selects only the requested records

Short Text data type Default data type of a field; can contain up to alphanumeric 255 characters

SkyDrive Microsoft’s free online service that provides cloud storage

Smart tags Indicate common actions that may be taken if certain conditions are encountered or if a control has a problem; clicking a smart tag displays a list of possible actions

Split form Two synchronized views of a table data in Layout/Form View and Datasheet View, shown simultaneously

Structured Query Language (SQL) Database management programming language used by MySQL and other systems; uses commands such as SELECT, FROM, WHERE, and JOIN

Subform A secondary (child) form placed on a main (parent) form, allowing the user to view and complete data entries for multiple tables through one form

Subreport Displays subsets of data derived from related database tables, similar to subforms

Switchboard Older interface, created through the Switchboard Manager, containing menus and buttons for opening objects and performing tasks

Tab order Order in which Access moves among form fields when you press **[Tab]** or **[Enter]**

Table A file or collection of related records; contain the data used in all other database objects

Text box Control that displays the actual data stored in a field (e.g., Smith might be the data displayed in a LastName text box linked to the LastName field in an Employees table)

Text file Small alphanumeric text file that lacks formatting and font information; compatible across virtually all hardware and software platforms

Total row Can be displayed on a query grid to add aggregate functions to total, average, or find minimum/maximum values

Unbound control Item that is independent of any table data, such as a shape, image, or text used for a title

Update query Query that makes global changes to a group of records in one or more tables

Validation rule Field property that enables you to limit values entered into the field to reduce errors associated with data entry (e.g., limit the value typed into an Hours Worked field to less than 60)

Validation text Contains instructions or valid data values to help guide the data entry personnel

Web server Hardware and software used to store and deliver online web content

Wildcards Special characters, such as an asterisk (*), used to represent multiple characters or a question mark (?) to represent any single character

Wizard Tool that walks you through the selection and ordering of specific fields from the tables or queries that contain the data you want to place onto a form, query, or report

Work Area Main part of the screen where you design tables, queries, forms, and reports; where you enter data into tables and forms