# MICROSOFT ACCESS USER MANUAL

**ABOUT MS-ACCESS:-**

Microsoft Access is a Database Management System (DBMS) from Microsoft that combines the relational Microsoft Jet Database Engine with a graphical user interface and software development tools. It is a member of the Microsoft Office suite of applications, included in the professional and higher editions. Some features are:-

* It stores data in its own format based on the Access Jet Database Engine.
* You can export data to and import data from word processing files, spread sheets, or database files directly.
* It can also import or link directly to data stored in other applications and databases
* Software developers can use Microsoft Access to develop application software.
* Access can work with most popular databases that support the Open Database Connectivity (ODBC) standard, including SQL Server, Oracle, and DB2.
* It provides all the data definition, data manipulation, and data control features that you need to manage large volumes of data.
* You can use an Access desktop database (.accdb or .mdb) either as a standalone RDBMS on a single workstation or in a shared client/server mode across a network.

**MS-ACCESS TOOLS:-**

MS Access uses variety of tools to help the user list and organize information, as well as prepare specially designed reports. When you create a database, Access offers you Tables, Queries, Forms, Reports, Macros, and Modules. Databases in Access are composed of many objects but the following are the major:-

1. **TABLES:-**

While creating a database, you store your data in tables. Select "Open" in the file's object box to create a table. Once a table is created, the user can enter data into the table.

* In MS Access you can customize the fields, data, and formatting within a table. You can easily format table font, row height, column width, freeze or hide columns. You even have the ability to modify key table elements such as renaming table fields and editing table records on the fly from almost anywhere in the application.
* You can create a new field in Access by entering data in a new column in Datasheet view. When you create a field by entering data in Datasheet view, Access automatically assigns a data type for the field, based on the value that you enter. If no other data type is implied by your input, Access sets the data type to Text. If needed, you can change the data type by using the Ribbon.
* Because you store data about different subjects in separate tables, you need some way to tie the data together so that you can easily combine related data from those separate tables. To connect the data stored in different tables, you create relationships. A relationship is a logical connection between two tables that specifies fields that the tables have in common.

1. **QUERIES:-**

A query is a request for data results, and for action on data. You can use a query to answer a simple question, to perform calculations, to combine data from different tables, or even to add, change, or delete table data. Query makes it easy to access a specific record or data. With a query you can apply a filter to the table's data, so that you only get the information that you want.For example, if your database has a table with a lot of information about products and you want to review a list of products and their prices, here’s how you’d create a select query to return just the product names and the respective price:

* Open the database and on the **Create** tab, click **Query Design**.
* In the **Show Table** box, on the **Tables** tab, double-click the **Products** table and then close the dialog box.
* In the Products table, let’s say that you have Product Name and List Price fields. Double-click the **Product Name** and **List Price** to add these fields to the query design grid.
* On the **Design** tab, click **Run**. The query runs, and displays a list of products and their prices.

1. **FORMS:-**

A form in Access 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. 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.

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

For split form, click on **Create** tab, in the **Forms** group, click **More Forms**, and then click **Split Form**.

For multiple form, click on **Create** tab, in the **Forms** group, click **More Forms**, and then click **Multiple Items**.

1. **REPORTS:-**

Reports organize and summarize data for viewing online or for printing. A detail report displays all of the selected records. You can include summary data such as totals, counts, and percentages in a detail report. To use the report option:-

* Open the Navigation pane.
* Click the **table** or **query** on which you want to base your report.
* Activate the **Create** tab.
* Click the **Report** button in the Reports group. Access creates your report and displays your report in **Layout** view. You can modify the report.
* Click the Save button on the Quick Access toolbar.

1. **MACROS:-**

A macro in Access is a tool that allows you to automate tasks and add functionality to your forms, reports, and controls. For example, if you add a command button to a form, you associate the button's **OnClick** event to a macro, and the macro contains the commands that you want the button to perform each time it is clicked.

To display the macro builder for user interface macros:

* On the **Create** tab, in the **Macros & Code** group, click **Macro**.

To display the macro builder for data macros:

* Open any table in Datasheet view. On the **Table** tab in the **Before Events** and **After Events** groups, click one of the event commands such as **Before Change** or **After Insert**.

1. **MODULES:-**

Modules are code sheets that are specific to your application. They are not fired off directly by events in the database, but have to be called directly. They are a means of creating procedures in a general manner, rather than specifically running in an object like a form or a report.

* Click on the **ribbon**, in the **Create** tab, click **Module.** This creates a new module and enters the **Editor**.
* In a form or report, on the ribbon, on the **Design** tab, click the **View** **Code** icon.
* Click any of the modules shown in the **Navigation** window.

1. **COMBO BOX:-**

A combo box is an object or control which contains a drop-down list of values that the user can select from. The combo box control provides a more compact way to present a list of choices. The list is hidden until you click the drop-down arrow. It also gives you the ability to enter a value that is not in the list. Combo box can be used:-

* Go to **Design** tab and select **Use Control Wizards** option from the **Controls** menu and then select the **Combo Box Control** from the menu.
* Now, draw the combo box where you want and when you release your mouse then you will see the Combo Box Wizard dialog box.
* Enter the values you want to be displayed in the drop-down list and click **Next**.
* Enter the **label** for your combo box and click **Finish** when done.

1. **REPORT WIZARD:-**

Report wizard guides you through a series of questions and then generate a report based on your answers. To use the Report Wizard in Access, follow these steps:

* Click the Create tab.
* In the Reports group, click the Report Wizard icon.The Report Wizard dialog box appears.
* Click in the Tables/Queries list box and choose the table or query that contains the data you want to print in a report.
* Click a field in the Available Fields box and then click the > button.
* Repeat this step for each additional field you want to display in your report.
* Click Next. Another dialog box appears, asking whether you want to group your data by a specific field, such as by First Name, Last Name, or Sales.
* Click a field name displayed in the box and then click the > button.
* Repeat this step for each additional field you want to use to group your data on the report.
* Click Next. Another dialog box appears, asking you to choose up to four fields to use for sorting your data in your report.
* You can sort the data in your report, using up to four fields.
* Click in a list box and choose a field to sort your data.
* Click Next. Another dialog box appears, asking you how to lay out your report.
* The Report Wizard offers different options for making your report look readable.
* In the Layout group. Select a radio button, such as Stepped or Block.
* You may see different options depending on the fields you chose in the previous steps.
* Click Next.Another dialog box appears, asking for a descriptive name for your report.
* Type a descriptive name for your report and then click Finish.Access displays your report.
* To view your report again, double-click the report name in the left pane of the Access window.

1. **DESIGN VIEW:-**

Most Access objects are displayed in Design view, which allows you to work with the underlying structure of your tables, queries, forms, and reports.

1. **Tables in Design View:-**

While Datasheet view lets you work directly with the data in tables, Design view takes you behind the scenes to work with the table structure. In Design view you have much finer control over how the fields in your data are defined and validated. You can open a closed table in Design view with just a few clicks. You can easily open tables in design view following these steps:

* Locate the table in the Navigation Pane and right-click on it.
* From the shortcut menu, select **Design View**. The table object opens as a tab on the work surface.
* If a table is already open in Datasheet view, you can switch to Design view by clicking the **View** icon in the toolbar.

1. **Queries in Design View:-**

Design View enables you to quickly build a query, test it, modify it, test it again, and so on, as much as you need to. Just follow these steps to create a simple query:

* Display the Create tab on the Ribbon.
* Click the Query Design button in the Other group.  
  Access displays Design view and the Show Table dialog box.
* In the Show Table dialog box, select the table that contains the fields you want to display in the query datasheet, and then click the dialog box's Add button.
* Click the Close button in the Show Table dialog box.  
  Now Design view displays the table you selected in its top pane and the empty design grid in its bottom pane.  
  You can close the Query Property sheet - you don't need it right now. Redisplay it at any time by clicking Property Sheet in the Show/Hide group of the Design tab on the Ribbon.
* Double-click a field name in the top pane to display that field name in the bottom pane - the design grid. Repeat to include any additional fields.
* Click the View button to see the datasheet with the data selected by your query.

1. **DATASHEET VIEW:-**

The Datasheet view in Access web apps works well when you want to see or work with data in rows and columns, similar to a spread sheet format.

When you create a new table in an Access web app, Access automatically creates a Datasheet view which you can customize. You can also add additional Datasheet views. Here’s how:

* Click the **Add New View** button (the plus sign) on the right side of the View Selector.
* In the Add New View box, type a name for the view, and in the **View Type** list, pick **Datasheet**.
* If you’d like to rename, copy, change or delete a datasheet view, click the **Settings/Actions** button to see a list of options available. To modify the datasheet layout, click **Edit** on this list.