

Interface In DBMS

Interface means “The way of communication performed in between a user and a Database management system” like query passing.

This interface is further divided in four categories on the basis of technology used.

1. Menu based
2. Form based
3. Graphical user interface (GUI) based
4. Natural language based

Menu based:

In this all the options are displayed in form of list or menu, through which we can select any option and that option leads us to the destination.

Example: When we search anything in web browser then it shows all the possible results in a list manner, from which we can click on any option.

Or access any website, where all available options are arranged in menu form.

Latest SQL software provide facility to perform different operations on Database with the help of these menu-based options, in which query writing is not required. Maximum commands are already arranged in form of list or menu, in which we just need to select the command we wanted to perform.

Popup menus are the best example of it.

This interface provides Easy way to access, manipulate or insert data.

These are used at those places where browsing type operation are performed.

No need to follow any sequence or structure, we can access direct the required place in database.

No need to remembers all the coding or commands.

Rollback function is available, means we can get back to the first position just by pressing back.

In network-based Databases we can access any part of a database available on any server.

Form based:

In this a form type structure is shown to user to insert data or operate data in a database.

Example: online form filling for exams.

This is also a good option to prevent redundancy because each and every user need to go through these forms to access or manipulate databases.

This concept makes computing very easy for those who have only basic knowledge of computer operating.

Commit buttons (submit/save/next) are given at the end of every form so that the last work done can be saved and only after that user can go further. Some times after click these commit buttons we can't change the old entries made. So before clicking on it we need to be very careful.

These forms follow a sequence to maintain the new data in a specific order.

Individual forms are popup for each query.

If a form is very big and split in small parts then all the parts of the form filled by a user stored at one server.

Graphical user interface based:

In this all the available options are present as graphical symbols or buttons, like keys on calculator.

All the possible queries are given in an image format to make experience easy and smooth. Some time it's follow a combination of form and menu-based interface.

In this the overall schema is represented as a graphical image, when we click on any specific part then the resulted query is executed.

This makes computing very fast, because user needs to use images instead of passing queries.

Online games are the best example of it. The user moves in which direction the related commands start functioning.

Natural language based:

In this user can pass its query just by writing them in natural language (for computers its English).

To pass on a query to the database user need to follow a structure to write a query.

Wrong format can deny the operation.

These schemas are consisting of commands and keywords which are predefined.

In this user needs to understand and memories the format of queries and all the commands.

Sometime the query run on different page and the output is displayed on different page. This will make computing a little cozy.