Detailed notes on database approach

Step 1:

The database strategy. The usage of a database management system (DBMS) provides facilities for querying, data security and integrity, and permits simultaneous access to data by a number of different users, which is an upgrade over the shared file solution.

Step 2: Database Approach Characteristics

Manages Information

Because information is always useful for whatever activity we do, a database always takes care of its information. It keeps track of all the information we need. We become more purposeful users of our data when we manage information using a database.

Easy Operation Implementation

All actions, including as insert, remove, update, and search, are performed in a flexible and user-friendly manner. These operations are fairly straightforward to accomplish using a database. These operations can be performed by a user with limited knowledge. This feature of a database increases its power.

Multiple Views of Database

A view is essentially a subset of the database. A view is created and dedicated to a specific system user. Users of the system may have differing perspectives on the same system. Every view only shows data that is relevant to a single user or a group of users. It is the users' obligation to be aware of how and where their personal data is stored.

Information for a Specific Purpose

A database is a collection of data with a defined purpose. A database for a student management system, for example, is used to keep track of a student's grades, fees, and attendance. This information is used to keep track of students' progress.

It has Users of Specific Interest

There is usually some indented group of users and apps that these user groups are interested in in a database.

In a library system, for example, there are three users: the college's formal administration, the librarian, and the students.

. Represent Some Real-World Applications

A database is a representation of some characteristics of real-world applications. In the real world, any change is reflected in the database. If we make any updates to our real-world apps, such as railway reservation system then it will be reflected in database too.

Take, for example, a railway reservation system; we have in mind certain specific applications for keeping track of attendance, waiting lists, train arrival and departure times, specific days, and so on for each train.

Self Describing nature

A database is self-descriptive in that it describes and narrates itself at all times. It describes the entire data structure, as well as the constraints and variables.

It distinguishes it from classic file management systems, which did not include definition as part of the application software. When needed, users and DBMS software refer to these definitions.

 Logical Relationship Between Records and Data

The records and data in a database are linked in a logical way. As a result, a user can access various records based on their needs.

Shelter Between Program and Data

If a user altered the structure of a file in a traditional file management system, all the programmes that used that file had to be changed as well. The application programmes define the structure of data files.

So there you have it, the basic characteristics of a database approach.