TYPES OF DBMS

We have two types of DBMS system as per given below

A. On the basis of numbers of users
B. On the basis of location of servers

On the basis of numbers of users is further classified in two categories:

1) Single User
2) Multiple user

On the basis of location of server is further classified in four categories:

1) Centralized DBMS
2) Distributed DBMS
3) Parallel DBMS
4) Client/Server DBMS

In this note section we will discuss about on the basis of numbers of users:

SINGLE USER:

In this category the owner of the DBMS maybe a single person, or a small organization, because in this category only one user can use the DBMS at one time. This kind of DBMS is designed as per the requirement of the user. These DBMS can run in limited resources.

Example: account system of any small shop.

Basic properties of these type of DBMS are as per given below:

1. These kinds of DBMS have only one view. The database is updated after each use.
2. Specific design makes it less popular because every specific DBMS cannot fulfill the requirement of each user. Means it is useful for those only who ordered it or designed it.
3. These are costly.
4. The user should have technical knowledge of the database for better performance.
5. Only one user can access it at one time, so the overall time maybe increased depends on the numbers of users.
6. These kind of database does not depend on the devices or machine. Means maybe we have 2 computers, but the database can not be used on both computers at once. This kind of database maybe used at one computer at once and when the first user has finished his/her work and closes the DBMS then second user on second computer can use the DBMS. So, if multiple users want to access this database form their own computer or device, then they all have to wait as per their request number.

MULTIPLE USER:

In this category multiple users can access the database at once simultaneously. In this a single database can be accessed from multiple devices anytime. These kinds of DBMS have multiple views and designed to satisfy the requirement of a large group of users.

Example: bank management, online ticket booking etc.

Basic properties of these type of DBMS are as per given below:

1. Multiple views allowed concurrent access.
2. Complex and lengthy
3. Less costly
4. It is not necessary for every user to have technical knowledge because for such kind of DBMS separate maintenance or programmer teams are hired.
5. Multiple users mean multiple random access, this makes these DBMS a little bit risky in sense of security of data.
6. These are little bit complex.
7. In this category prebuild DBMS are also available to purchase.