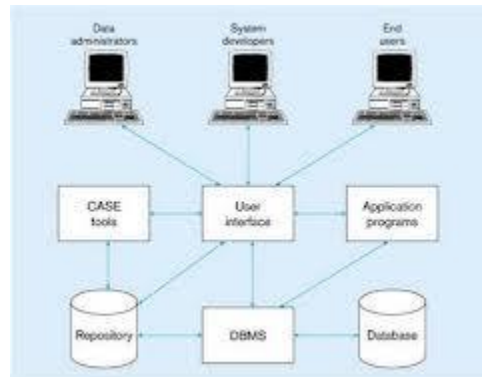


COMPONENTS OF DBMS

A database management system (DBMS) consists of several components. Each component plays very important role in the database management system environment. The major components of database management system are:

- Software
- Hardware
- Data
- Procedures
- Users

1. **HARDWARE:** The hardware is the actual computer system used for keeping and accessing the database. It consists of a set of physical electronic devices such as computers (together with associated I/O devices like disk drives), storage devices, I/O channels, electromechanical devices that make interface between computers and the real world systems etc, and so on. It is impossible to implement the DBMS without the hardware devices, In a network, a powerful computer with high data processing speed and a storage device with large storage capacity is required as database server.
2. **SOFTWARE:** The main component of a DBMS is the software. It is the set of programs used to handle the database and to control and manage the overall computerized database. DBMS software itself, is the most important software component in the overall system.
3. **DATA:** Data is the most important component of the DBMS. The main purpose of DBMS is to process the data. In DBMS, databases are defined, constructed and then data is stored, updated and retrieved to and from the databases. The database contains both the actual data and the metadata.
4. **PROCEDURES:** Procedures refer to the instructions and rules that help to design the database and to use the DBMS. The users that operate and manage the DBMS require documented procedures on how to use or run the database management system.
5. **USERS:** The users are the people who manage the databases and perform different operations on the databases in the database system. There are three kinds of people who play different roles in database system



6. Application Programmers
7. Database Administrators
8. End-Users