Database (DB)

Here are some different definitions and concepts related to Database and Database Management System.

Database

Database is an organized collection of fact. In other word we can say that it is collection of information arranged and presented to serve and assigned purpose.
An example of Database is a dictionary, where word arranged alphabetically. Another example is telephone directory.

Database

A database is an organized collection of data whose content must be quickly and easily
Accessed
Managed
Updated

Database definition:
A Database is a collection of related data organized in a way that data can be easily accessed, managed and updated. Any piece of information can be a data, for example name of your school. Database is actually a place where related piece of information is stored and various operations can be performed on it.

Database:
A database is a collection of stored operational data used by various applications and/or users by some particular enterprise or by a set of outside authorized applications and authorized users.

- **Database**
  - Stores all organizational data in central location
  - Eliminates redundant data to reduce possibility of inconsistent data

What is a database?

A database is a collection of data which can be used:
- alone, or
- Combined / related to other data to provide answers to the user's question.

Database Management System (DBMS)

A DBMS is software that allows creation, definition and manipulation of database. DBMS is actually a tool used to perform any kind of operation on data in database. It maintains data consistency in case of multiple users. Here are some examples of popular dbms, MySql, Oracle, Sybase, Microsoft Access and IBM DB2 etc.

Components of Database System:
The database system can be divided into four components.

Users: Users may be of various types such as DB administrator, System developer and End users.

Database application: Database application may be Personal, Departmental, Enterprise and Internal.

DBMS: Software that Allows users to define; create and manages database access, Ex: MySql, Oracle etc.

Database: Collection of logical data.

Database Management System

Database Management System is About Managing and structuring the collections of data held on computers. A database consists of an organized collection of data for one or more uses, typically in digital form. Database involves the type of their contents.

E.g.:- bibliographic, document - text, statistical.

Database Management System (DBMS)

A Database Management System (DBMS) is a software program that enables the creation and management of databases. Generally, these databases will be more complex than the text file/spreadsheet.

Some of the more popular relational database management systems include:

Microsoft Access, File maker, Microsoft SQL Server, MySQL, and Oracle

DBMS

DBMS stands for "Database Management System." In short, a DBMS is a database program. Technically speaking, it is a software system that uses a standard method of cataloging, retrieving, and running queries on data. The DBMS manages incoming data, organizes it, and provides ways for the data to be modified or extracted by users or other programs.

Some DBMS examples include MySQL, PostgreSQL, Microsoft Access, SQL Server, FileMaker, Oracle, RDBMS, dBASE, Clipper, and FoxPro.

What is a Database Management System?

A DBMS is a collection of programs which

- provide management of databases
- control access to data
- contain a query language to retrieve information easily

Database management system:

- A DBMS is a data storage and retrieval system which permits data to be stored non-redundantly while making it appear to the user as if the data is well-integrated.

Database Management System (DBMS)

A collection of programs that enables you to store, modify, and extract information from a database. There are many different types of DBMS, ranging from small systems that run on personal computers to huge systems that run on mainframes. The following are examples of database applications:

- Computerized library systems
- Automated teller machines
- Flight reservation systems
- Computerized parts inventory systems

Introduction to Database

DBMS stands for Database Management System. A DBMS consists of collection of interrelated data and a set of program to access that data. The collection of data is known as a database. A database consists of the data relat ed to one organization. Prior to DBMS systems, the data was kept under the file system in forms of multiple files.

A database is a collection of related files that are usually integrated, linked or cross-referenced to one another.

DBMS Fundamentals

A database management system is a set of software programs that allows users to create, edit and update data in database files, and store and retrieve data from those database files. Data in a database can be added, deleted, changed, sorted or searched all using a DBMS.

Advantages of a DBMS:

Improved availability
Minimized redundancy
Accuracy
Program and file consistency
User-friendly
Improved security
Reduction of Redundancy
Sharing of Data
Data independence
Data integrity and security
Data administration
Reduced application development time
Easy retrieval of data
Reduced development time and maintenance need

Disadvantages of a DBMS:

There are basically two major downsides to using DBMS. One of these is cost, and the other the threat to data security.

Complexity
Costly
Large in size
Cost
Security

Database Management System:

A Database Management System (DBMS) is a software system that manages execution of users applications to access and modify database data so that the data security, data integrity, and data reliability is guaranteed for each application and each application is written with an assumption that it is the only application active in the database.

Advantages of the Database approach:

- Data Independence/Reduced Maintenance
- Minimal Data Redundancy/Improved Consistency
- Data Integration
- Multiple Relationships
- Improved Data Sharing
- Increased Application Development Productivity
- Enforcement of Standards
- Improved Data Quality (Constraints)
- Better Data Accessibility/ Responsiveness
- Security, Backup/Recovery, Concurrency

Database Management System (DBMS)

– Software system that supports creation, population, and querying of a database.