

## Database Management System

### Lesson objectives

1. Explain the term database management system (DBMS)
2. Explain the uses of DBMS
3. Load and exit Microsoft Access

### Database Management system

DBMS involves the process of creating, monitoring, administrating, and maintenance of the database in an organization.

What is a database a database is a collection of related information that is organized so that it can be easily accessed, managed and updated even retrieved by the user.

DBMS a DBMS is a collection or set of programs that enables the user to store, modify, create, update and extract information from a database.

It also provides users useful tools to add, delete, modify and analyze data stored in one location.

It also provides facilities for controlling data access, enforcing data integrity, managing concurrence control and recovering the database after failures and restoring it from a backup files as well as data security.

### Examples of DBMS

1. Microsoft Access
2. Oracle
3. JAVA

4. Dbase 4
5. Dbase 5
6. Foxbase
7. MySQL ( My Structured query language)
8. SQL (Structured query language)
9. My SQL Server
10. FoxPro
11. Dbase
12. Etc.

#### Basic terms in DBMS

- |              |              |
|--------------|--------------|
| 1. Character | 7. Data      |
| 2. Field     | 8. Datatype  |
| 3. Records   | 9. Data item |
| 4. Rows      | 10. Etc      |
| 5. Columns   |              |
| 6. files     |              |

Character a character is the most basic element of data that can be observed and manipulated. A character is a single symbol such a digit, letter, or other special character (e.g \$, #, and ?).

Field: a field contains an item of data; that is a character, or group of characters that are related. For instance, a grouping

of related text characters such as “John Smith” makes up a name in the name field. Field could be Name, address, city, state, zip code and telephone number.

S/N	Name	address	City	state	Zip code	Telephone number
1	John Smith	4 old aba road	PH	Rivers	234	08077777777
2	Derah Mills	19 sangama st, Mile 1	PH	Rivers	234	08035467890
3	Debbie Smalls	20 Rumuola Rd	PH	Rivers	234	08123445555
4	Daniel Jones	8 Rumuomasi	PH	Rivers	234	08076543210

Records a record is composed of group of related fields. We can also say that a record contains a collection of attributes related to an entity such as a person or product.

File a database file is defined as a collection of related records. A database file is sometimes called a table. A file may be composed of a complete list of individuals on a mailing list, including their home address and telephone number.

Key in order to track and analyze data efficiency such a record requires a unique identifier or what is called a key. The key must be unique to a particular record. Just as an individual must have a unique phone number.

### Load and exit Microsoft Access

Microsoft Access is a database software package. A database is an organized collection of records. Telephone and address book are examples of paper database.

With Ms Access you can organize the students who attend a school. After creating a students’ database you can be able to manipulate it, and extract information from it.

## Steps to load Ms Access

You can load Ms Access from your Microsoft office suite. Example office 2007 have Microsoft Access 2007.

1. Click on start on your windows task bar
2. Select all programs and click Microsoft office 2007
3. Select Microsoft Access 2007 and click on it

The program load (starts up).

4. Click on the blank database
5. In the file name type the name of the database example "students"
6. Click on create.

The program working environment will display.

To exit Ms Access

1. Click/select on the file menu and click on close.
2. Click on close