INDIAN SCHOOL AL WADI AL KABIR

Class: VIII	Department : Computer Science	
HANDOUT	Topic: MS ACCESS CREATING DATABASE	Year :2022-2023

DATABASE:

A database is a collection of data organized in manner that allows easy access, retrieval, and use of that data.

DATABASE SOFTWARE:

Database software like access, base is a software allows you to create, access and manage a database on a computer.

Components of Database:

- Tables, Records and fields: In Access, a database consists of a collection of tables organized in rows and columns.
- A record is a row in a table that contains information about given person, product or an event.
- A Field is a column in a table that contains a specific piece of information within a record. It is the smallest unit of data.

Data sheet and forms:

• Each table appears a spreadsheet grid called data sheet. You can type directly into a data sheet. You can create forms, which are like dialog boxes that prompt for field entries to make data entry more convenient.

Creating table using design view:

- Field Name: There must be a unique name for each field in the table. For example in the students' detail table the field names are Student-ID, Name, Class, Transportation and fees.
- Data type: Each field has a data type that defines what you can store in it. Data entry is restricted to valid entries for the type you choose. For example, you cannot enter letters in a field set to number.
- Description: You can enter detailed description of the fields within the table.

Data types:

• Text: This is a general- purpose field containing any data. It has a limit of 255 characters and cannot be used for numeric calculations. Use this type for numeric entries that will not have calculations performed on them, such as telephone numbers and zip codes.

- Number: This type stores numeric data that you can use in calculations. It can also hold symbols, such as decimal points and commas.
- Date/Time: This type only stores numbers representing valid dates and times
- Currency: It stores currency data that you can use in calculations.
- Auto number: It stores a sequential number for each record.

Filter and Queries:

You can filter a table to show only desired records and fields. You can also create a query, which is like a saved filter. Queries also enable you to combine data from multiple related tables into a single datasheet of results.

Reports:

Report present data from tables and queries in an attractive format, complete with titles, headers, footers, and graphics

Primary key:

Primary key is a key that differentiates the records in a file. The data stored in the key filed unique to a specific record. In each new table that you create, you'll want to set one filed as the primary key.

Validation Rule:

A validation rule is used to limit a field entry to meet certain criteria. By validation Rules, you can ensure that the correct value is entered into the field. If user makes an incorrect entry, error alerts can stop the user, provide a warning or just provide information.