

UNIT-1. Introduction.

Purpose of Database system - views of data - data models, database management system. Three schema architecture of DBMS, Components of DBMS. Entity, relationship model. Conceptual data modelling - motivation, entities, entity types, attributes, relationships, types. ER diagram notations, Examples.

why do we need DBMS.

DBMS provides mechanisms to deal with this kind of data inconsistency while allowing users to access data concurrently.

Difference between file system and DBMS.

File system - stores the raw data or raw files into a hard disk, while DBMS stores is a software system which helps to store, manipulate or recover data.

File system is the method of organising the files with a hard disk or it is defined as a medium of storage.

This file system arranges the file and helps in retrieving the file and it supports all different file types such as mp3, doc, txt, mp4 etc..

Ex for file system - NTFS (New Technology File system)

EXT - Extended File System.

DBMS:-

This the software used to store and regain user's data also the provides the required security measures.

Has group of programmes which manipulates DB.

In a file system, user has to write procedures while, DBMS no needs for writing procedures.

Problems in file processing

- data redundancy - duplication of information
- difficulties in accessing the data → for each task we
- data isolation - diff file formats need new programs
- Integrity problems - unintended changes, h/d failure, human error.
- Atomicity problems
- security problems. ↳ failure leaves in inconsistent state

Purpose of DBMS :-

- data to information
- Information into knowledge
- Knowledge to action.