

01-dbms-basics.md

What is a DBMS (Database Management System)

Definition

A **Database Management System (DBMS)** is software that helps users store, organize, retrieve, update, and manage data in a database.

Why DBMS is needed

- Allows multiple users to access data
- Reduces data redundancy
- Maintains data consistency
- Improves data security
- Controls user access

Simple Example

Instead of maintaining multiple Excel files for student records, a DBMS stores all data in a centralized database.

Key Point for Revision

DBMS acts as an interface between users/applications and the database.