


By,
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Outline of the Lecture 1

- Basics of Database Management system
- File System
- Purpose of Database System

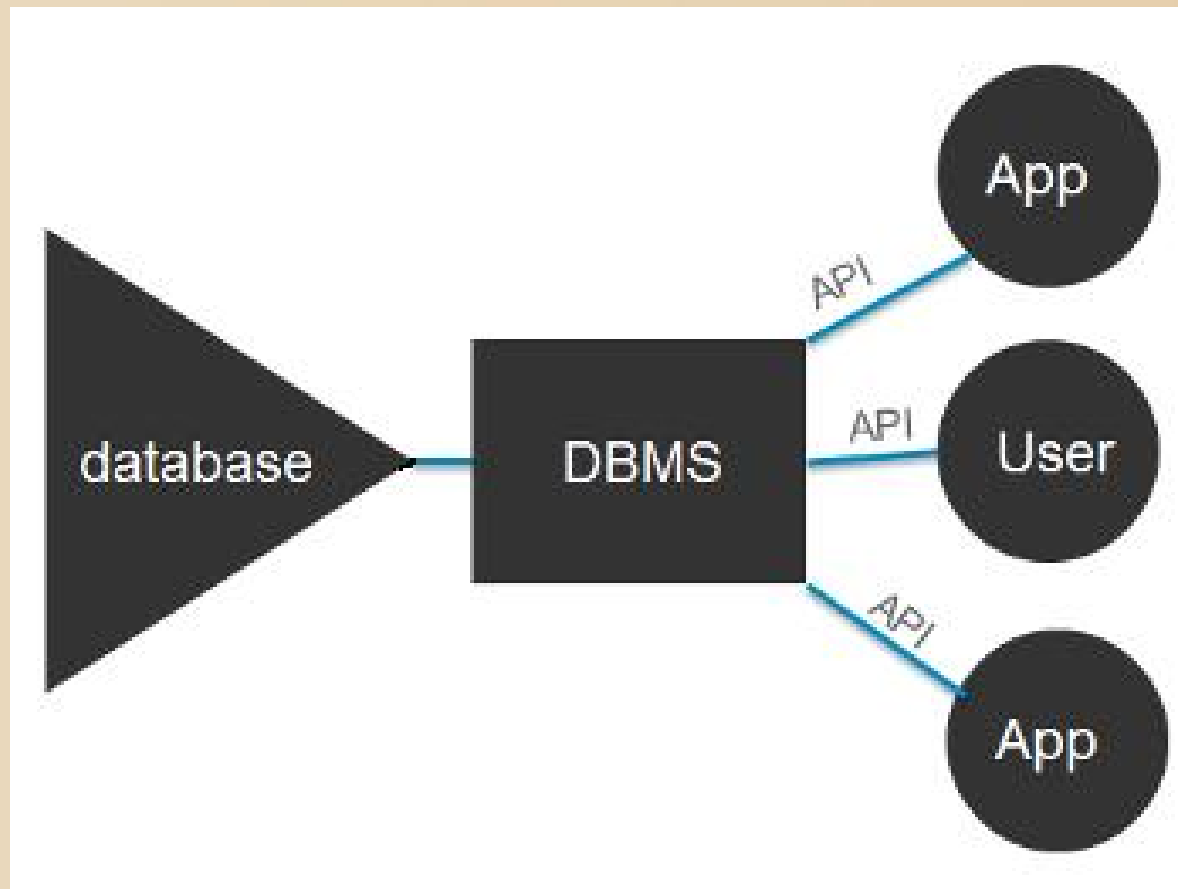
Introduction to DBMS



- Important terminologies of DBMS.
 1. Data.
 2. Database.
 3. Database Management System.
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Definition of DBMS

- Collection of interrelated data and set of programs to access those data.

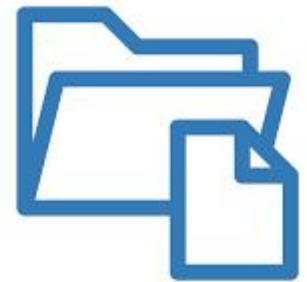


Goal of DBMS

- Provides an environment that is both convenient and efficient to use in
 1. Retrieving the data from database.
 2. Storing the data into the database.

File System

- In the early days, database applications were built on top of file systems.



File System Drawbacks

- **Data redundancy and inconsistency**

Same copies may be duplicated at several places and it may not be updated properly.

- **Difficulty in accessing data**

Need to write a new program to carry out each new task

- **Integrity problems**

Integrity constraints (e.g. $\text{account balance} > 0$) become part of program code

- **Concurrent access by multiple users.**

DBMS Functions

- Defining a database.
- Constructing a database.
- Manipulating a database.
- Sharing a database.
- Protecting a database.
- Maintaining a database.

Examples of Database Applications

- Hospital
- Bank
- University
- Library
- And Many more.....

Hospital Management System



ANY
QUESTIONS





End of Lecture 1

