



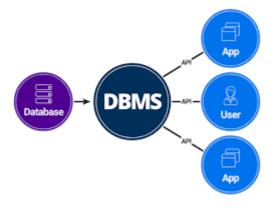
## File System Drawbacks

- Data Redundancy: Data redundancy often requires higher storage costs and poor access time.
- Data Inconsistency: Data Inconsistency is caused by data Redundancy. It happens when similar data is stored in different formats in more than one file.
- Data Isolation: Data isolation occurs in writing new applications when retrieving data which
  can be stored in different format and files



## □ DataBase definition

- Structured set of information designed and produced to be easily accessed, managed and modified by several users.
- A DataBase Management System (DBMS) is used to store information in a database. Using a
  DBMS, we can find, sort, transform and select information stored in database.

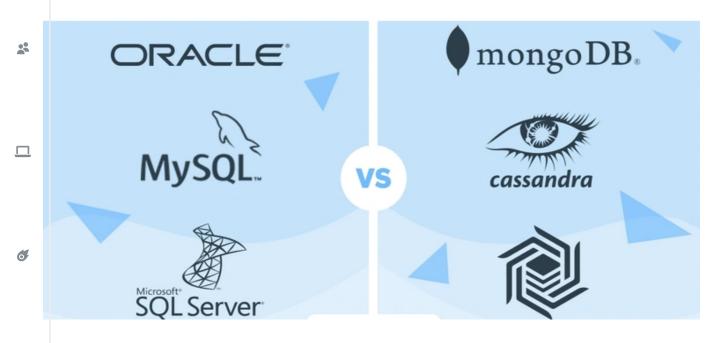


When choosing a modern database, one of the biggest decisions is picking a relational (SQL) or non-relational (NoSQL) data structure. While both are viable options, there are key differences between the two that users must keep in mind when making a decision.

Here, we break down the most important distinctions and discuss the best SQL and NoSQL catabase systems available.

The five critical differences between SQL vs NoSQL are:

- 1, SQL databases are relational, NoSQL databases are non-relational.
- 2. SQL databases use structured query language and have a predefined schema. NoSQL catabases have dynamic schemas for unstructured data.
- 3. SQL databases are vertically scalable, while NoSQL databases are horizontally scalable.
- 4. SQL databases are table-based, while NoSQL databases are document, key-value, graph, or vide-column stores.
- 5. SQL databases are better for multi-row transactions, while NoSQL is better for unstructured cata like documents or JSON.



Previous next >