



Document Databases





What are Document Databases ?

- Data is stored in the form of documents where file format is JSON/BSON or Binary JSON.
- It follows some kind of structure.

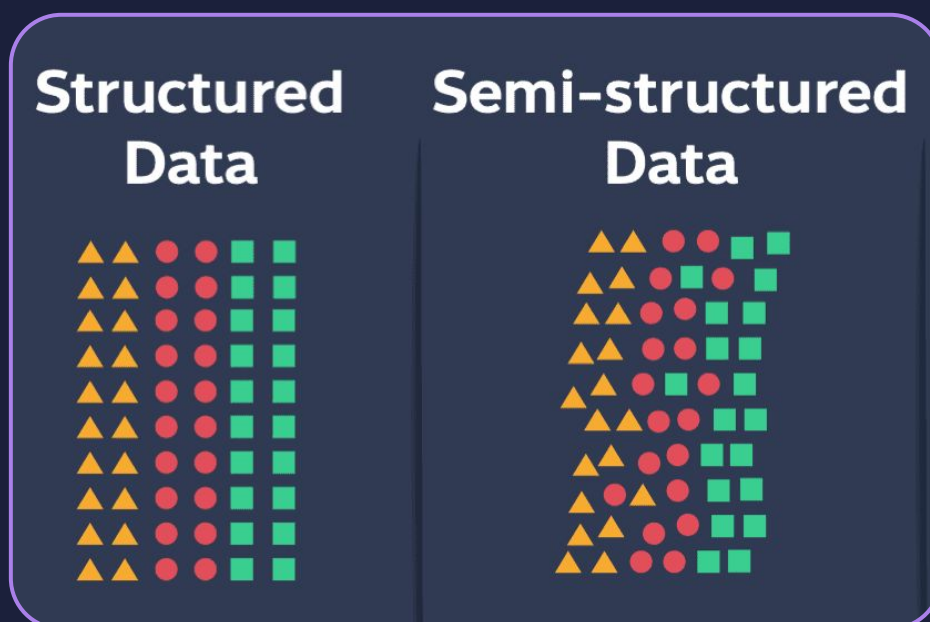




Use cases where document databases are used

1. In case of semi-structured data

Let's take the case of social media where we have posts, comments and associated likes and replies etc. Here, the structure is dynamic and changing.

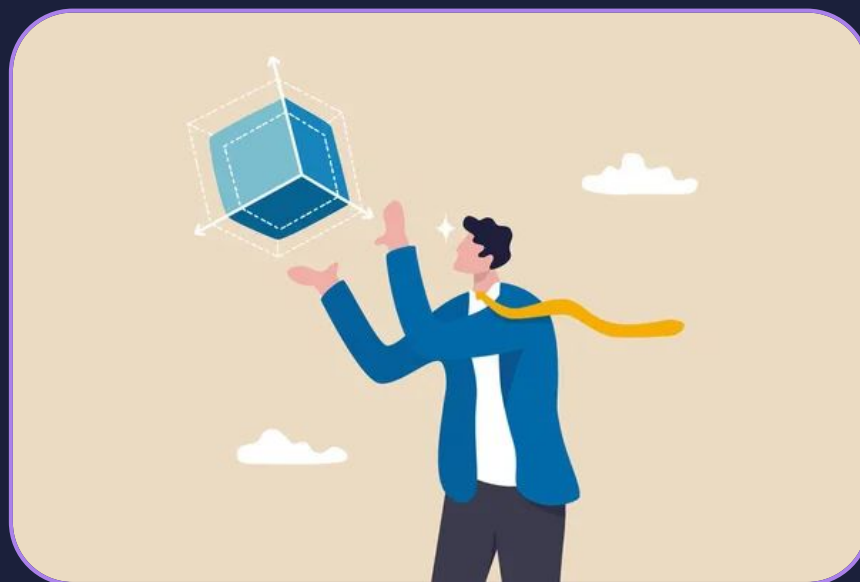




Use cases where document databases are used

2. In case of flexible schema requirement

Let's take the example of an ecommerce site where Products can be household or electronics. For household products, the identifying attributes can be 5 and for electronics it may be 7 based on the specifications. Hence, schema is not fixed. Here document databases help.





Use cases where document databases are used

3. Provides the best of both the worlds

It gives structure/schema to some extent and also provides scalability and flexibility. Hence, is a good mix of both the approaches.

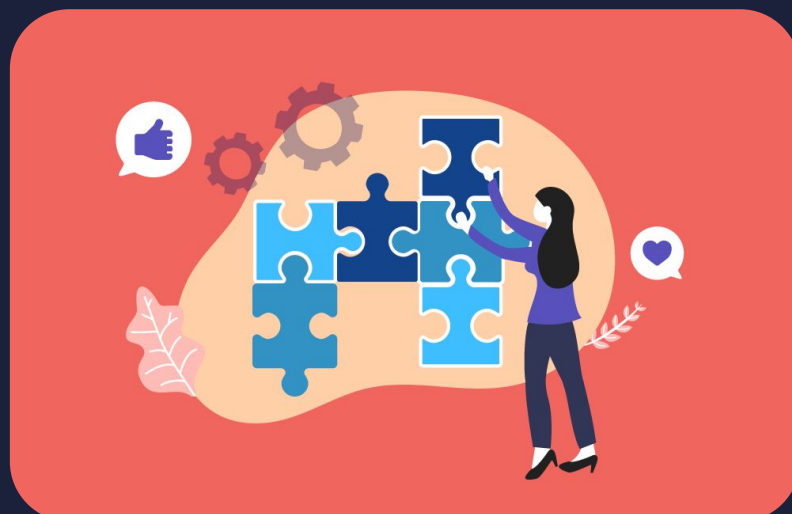




Challenges of a Document Database

1. Consistency

Since it is based on the concept of distributed system, achieving high consistency like RDBMS is a challenge.

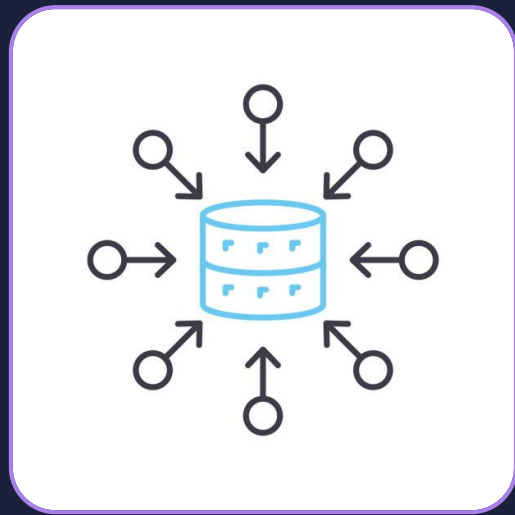




Challenges of a Document Database

2. Aggregation

The queries for performing aggregation (as per requirement) in the schema/database is complex.





Challenges of a Document Database

3. Transaction support

It is not as simple as in RDBMS and is rather complex. It has improved in latest releases but still needs to be worked upon.

*Most widely used Document Database is MongoDB



▶ THANK YOU ◀