MongoDB

Definition: The "MongoDb" is a noSql database which means its data will not stored in the form Table(i.e., rows and columns). **MongoDB** is a popular NoSQL database that uses a "**document-oriented data**" model to store data.

The "**mongodb**" stores their data in the form of "**Key-value pairs".** It doesn't have a proper structure, The data storage in this database varies like Key-value pairs, documents, graphs, columns.It follows a flexible structure.

MongoDB stores data as flexible, JSON-like documents in a format called BSON (Binary JSON).

Document Structure:

{

Key:value,

}

Structure of MongoDb:

MongoDB contains a number of databases, where the Databases contain a number of Collections, Where each and every Collection contains Documents, , inside this documents the data represnted in the form of key-value pairs.

MongoDB is a No SQL Database, where SQL queries are not required to write to perform the Database operations.

MongoDB is a Document based database, it is very easy to manage and develop.

(Inside this document the Data is stored in the form of **"Key:value"**pairs i.e., JSON Format)

Purpose:

MongoDB is designed for handling large volumes of unstructured or semi-structured data, making it ideal for big data, real-time analytics, mobile and web apps, IoT, and content management systems. It excels in situations where the data structure is dynamic, the application needs to scale, or high performance on reads and writes is essential.

It is suited for applications that need to handle large volumes of data, rapidly changing schemas, and real-time processing.

Use Cases:

- Big data applications
- Real-time analytics
- Mobile and web apps
- Internet of Things (IoT)
- Content management systems

MongoDB is widely used by organizations that require flexibility, scalability, and high performance.