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COMPARISION BETWEEN

MONGODB & SQL

MONGODB

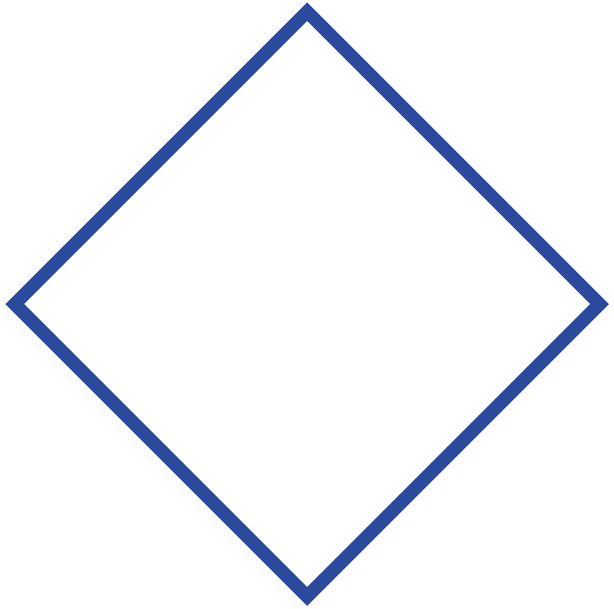
MONGODB IS AN OPEN SOURCE NOSQL DATABASE MANAGEMENT PROGRAM. NOSQL (NOT ONLY SQL) IS USED AS AN ALTERNATIVE TO TRADITIONAL RELATIONAL DATABASES. NOSQL DATABASES ARE QUITE USEFUL FOR WORKING WITH LARGE SETS OF DISTRIBUTED DATA. MONGODB IS A TOOL THAT CAN MANAGE DOCUMENT-ORIENTED INFORMATION, STORE OR RETRIEVE INFORMATION.

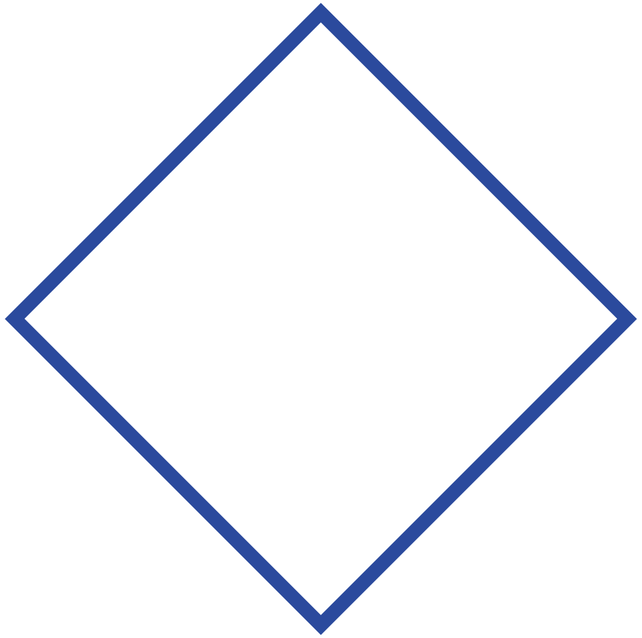
MONGODB IS USED FOR HIGH-VOLUME DATA STORAGE, HELPING ORGANIZATIONS STORE LARGE AMOUNTS OF DATA WHILE STILL PERFORMING RAPIDLY. ORGANIZATIONS ALSO USE MONGODB FOR ITS AD-HOC QUERIES, INDEXING, LOAD BALANCING, AGGREGATION, SERVER-SIDE JAVASCRIPT EXECUTION AND OTHER FEATURES.

SQL

SQL STANDS FOR STRUCTURED QUERY LANGUAGE. SQL IS USED TO COMMUNICATE WITH A DATABASE. ACCORDING TO ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE), IT IS THE STANDARD LANGUAGE FOR RELATIONAL DATABASE MANAGEMENT SYSTEMS.

SQL STATEMENTS ARE USED TO PERFORM TASKS SUCH AS UPDATE DATA ON A DATABASE, OR RETRIEVE DATA FROM A DATABASE. SOME COMMON RELATIONAL DATABASE MANAGEMENT SYSTEMS THAT USE SQL ARE: ORACLE, SYBASE, MICROSOFT SQL SERVER, MICROSOFT ACCESS, INGRES, ETC





MONGODB VS SQL

MONGODB

data is stored in collections.A collection can consist of many documents in which data is stored in JSON format of key-value. There can be hundreds of such collections inside a MongoDB database

-NoSQL databases like MongoDB were originally designed keeping resilience in mind. It runs on a cluster of commodity hardware and replicates the data across the nodes for high reliability and availability.

SQL

- *the data is stored in tables, where the column denotes the attribute and row represents a particular record..*

-the SQL databases were originally designed for standalone servers. To mitigate the risk of failure, their architecture moved towards a distributed database, where the database runs on a cluster of nodes, thus increasing resilience.

MONGODB VS SQL

MONGODB

there is no need to predefine any schema. A collection can store different types of documents without any problem. There is nothing to worry about if a new type of document arrives, it can easily be saved.

SQL

have a predefined schema to which the data should comply. For example, the number of columns in a table along with its data type has to be defined while creating the table. Any data that is saved in the table should match the table structure, otherwise, it will give an error.