**MONGO DB**

MongoDB is an open-source database, and leading NoSQL database. It is written in c++. MongoDB concepts needed to create and deploy a highly scalable and performance oriented database.

MongoDB is a **cross-platform, document oriented database that provides, high performance, high availability** and **easy scalability**. MongoDB works on concept of **collection** and **document**.

**DATABASE**

Database is a physical container for collections. Each database gets its own set of files on the file system. A single MongoDB server typically has multiple databases.

**COLLECTION**

**Collection** is a group of MongoDB documents. It is the equivalent of an **RDBMS** table. A collection exists within a **single** database. Collections do not enforce a schema. Documents within a collection can have different fields. Typically, all documents in a collection are of similar or related purpose.

**DOCUMENT**

A document is a set of **key-value pairs**. Documents have dynamic schema. Dynamic schema means that documents in the same collection do not need to have the same set of fields or structure, and common fields in a collection's documents may hold different types of data.

**ADVANTAGES OF MONGODB**

* Any relational database has a typical schema design that shows number of tables and the relationship between these tables. While in MongoDB there is no concept of relationship.

Advantages of MongoDB over RDBMS:

* **Schema less**: MongoDB is document database in which one collection holds different documents. Number of fields, content and size of the document can differ from one document to another.
* Structure of a single object is clear
* No complex joins
* Deep query-ability. MongoDB supports dynamic queries on documents using a document-based query language that's nearly as powerful as SQL.
* Conversion / mapping of application objects to database objects not needed.
* Uses internal memory for storing the (windowed) working set, enabling faster access of data.

**Why should use MongoDB**

* Document Oriented Storage: Data is stored in the form of JSON style documents.
* Index on any attribute
* Replication & High Availability
* Auto-Sharding
* Rich Queries
* Fast In-Place Updates
* Professional Support By MongoDB

## Where should use MongoDB?

* Big Data
* Content Management and Delivery
* Mobile and Social Infrastructure
* User Data Management
* Data Hub