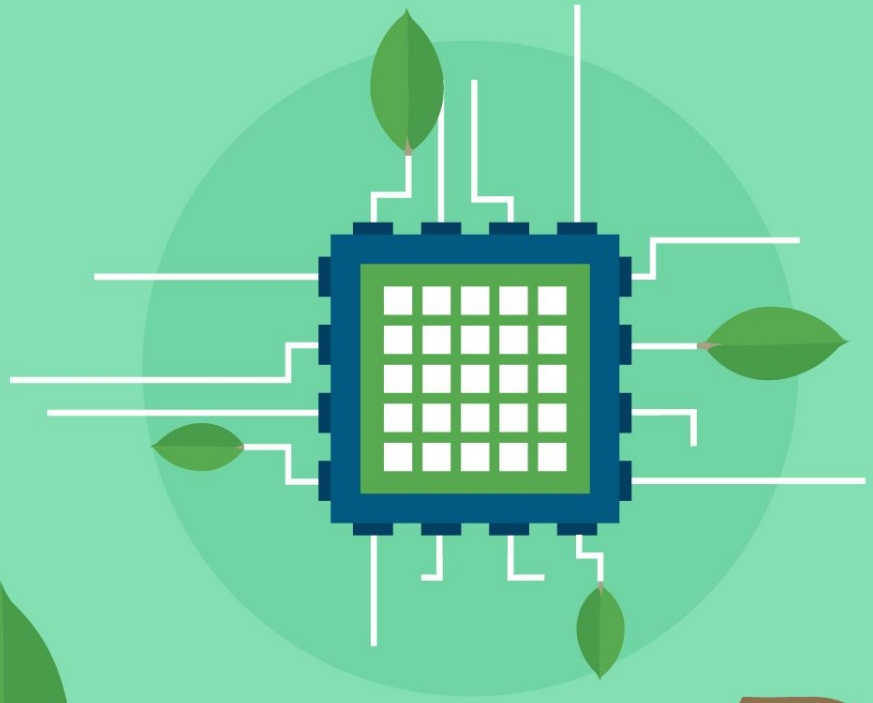


mongoDB

The database for modern applications

What is **NoSQL** Database?

Before starting with **MongoDB**, we must know about **NoSQL**.
NoSQL or “non-SQL” a non-structured database.
It provides a facility for storage and retrieval of data using fields.
While in SQL the data stores in a tabular form.
Companies are using a NoSQL database in big data and real-time applications
NoSQL offers “eventual consistency” so that it may not meet the real-time application requirements.

Still, its use to merits over relational databases.

What is **MongoDB**?

MongoDB is an open source platform written in C++ and has a very easy setup environment.

It is a cross-platform, document-oriented and non-structured database.

MongoDB provides high performance, high availability, and auto-scaling.

It is a NoSQL database and has flexibility with querying and indexing.

MongoDB has very rich query language resulting in high performance.

MongoDB Features

1- Ad-hoc Queries

MongoDB supports ad-hoc queries by indexing.

2- Schema-Less Database

It is very flexible than structured databases. There is no need to type mapping.

3- Document Oriented

It is document oriented, JSON like a database.

4- Indexing

Any document can index with primary and secondary indices.

5- Replication

It has this powerful tool. Every document has one primary node which further has two or more secondary replications.

6- Aggregation

For efficient usability, MongoDB has aggregation framework for batch processing.

7- GridFS

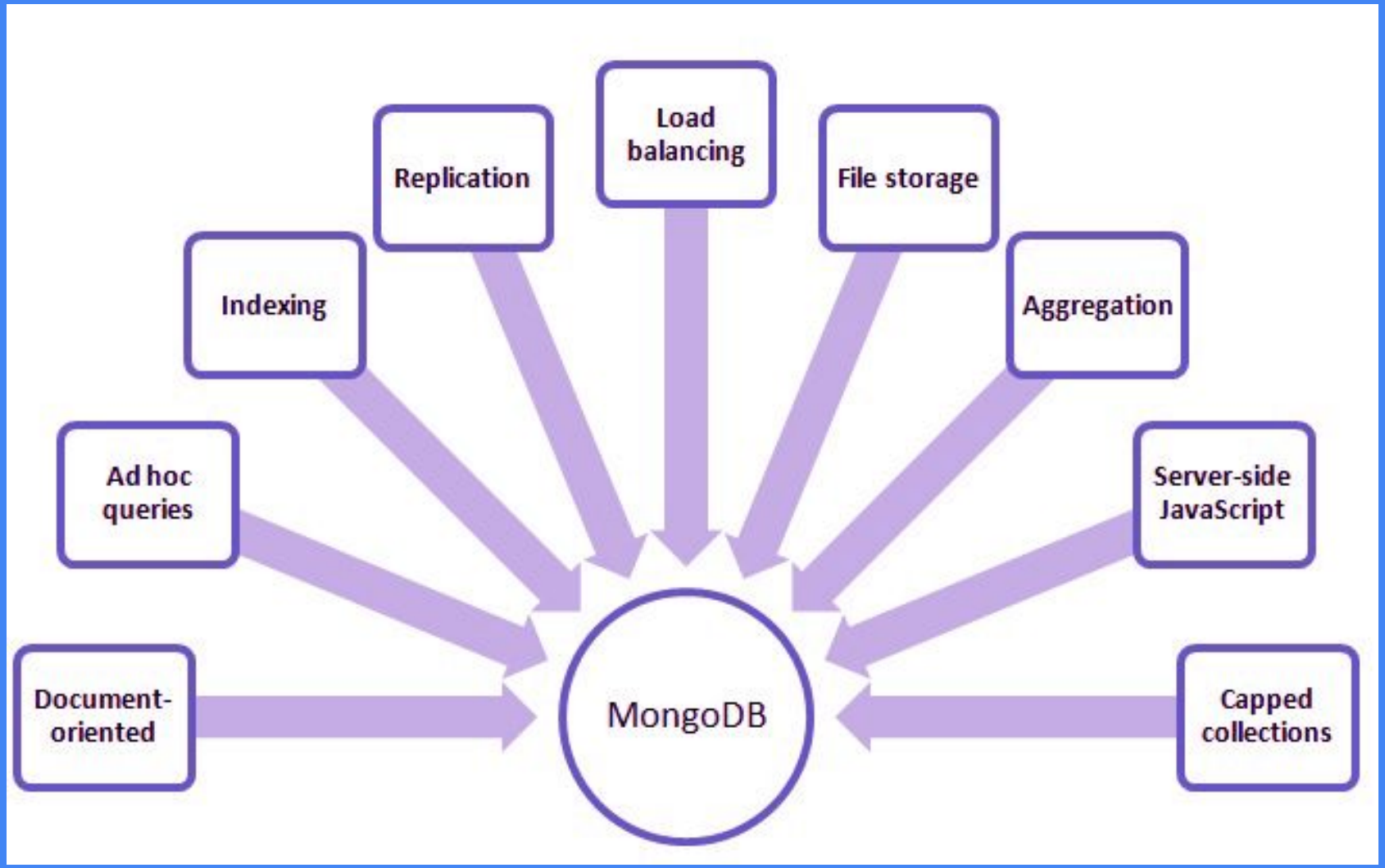
It has grid file system, so it can use to store files in multiple machines.

8- Sharding

For the larger data sets sharding is the best feature. It distributes larger data to multiple machines.

9- High Performance

Indexes support faster queries leading to high performance.


Load balancing
Replication
File storage
Indexing
Aggregation
Ad hoc queries
Server-side JavaScript
Document-oriented
MongoDB
Capped collections

MongoDB History

MongoDB was developed by a company named MongoDB Inc. formerly known as 10gen based in New York. The **MongoDB** was founded by Dwight Merriman, Eliot Horowitz, and Kevin Ryan in 2007. This trio was the team behind DoubleClick (now owned by Google). It was first developed as a platform as a service. It was then introduced in the market as open source database server in 2009 by **MongoDB** Inc. The company maintains the server and provides 24×7 email and call support. The first version of **MongoDB** is v1.4, which was released in March 2010.

MongoDB Applications

- In E-commerce product catalogue.
- **Big data**
- Content management
- Real-time analytics and high-speed logging.
- Maintain Geolocations
- Maintaining data from social websites.


Questions?