



mongoDB- Introduction

- ✿ MongoDB was created by Dwight Merriman and Eliot Horowitz.
- ✿ According to Merriman, the name of the database was derived from the word humongous meaning **“the idea of supporting large amounts of data.”**
- ✿ Merriman and Horowitz helped form 10Gen Inc. in 2007 to commercialize MongoDB and related software. The company was renamed MongoDB Inc. in the year of 2013.



Dwight Merriman

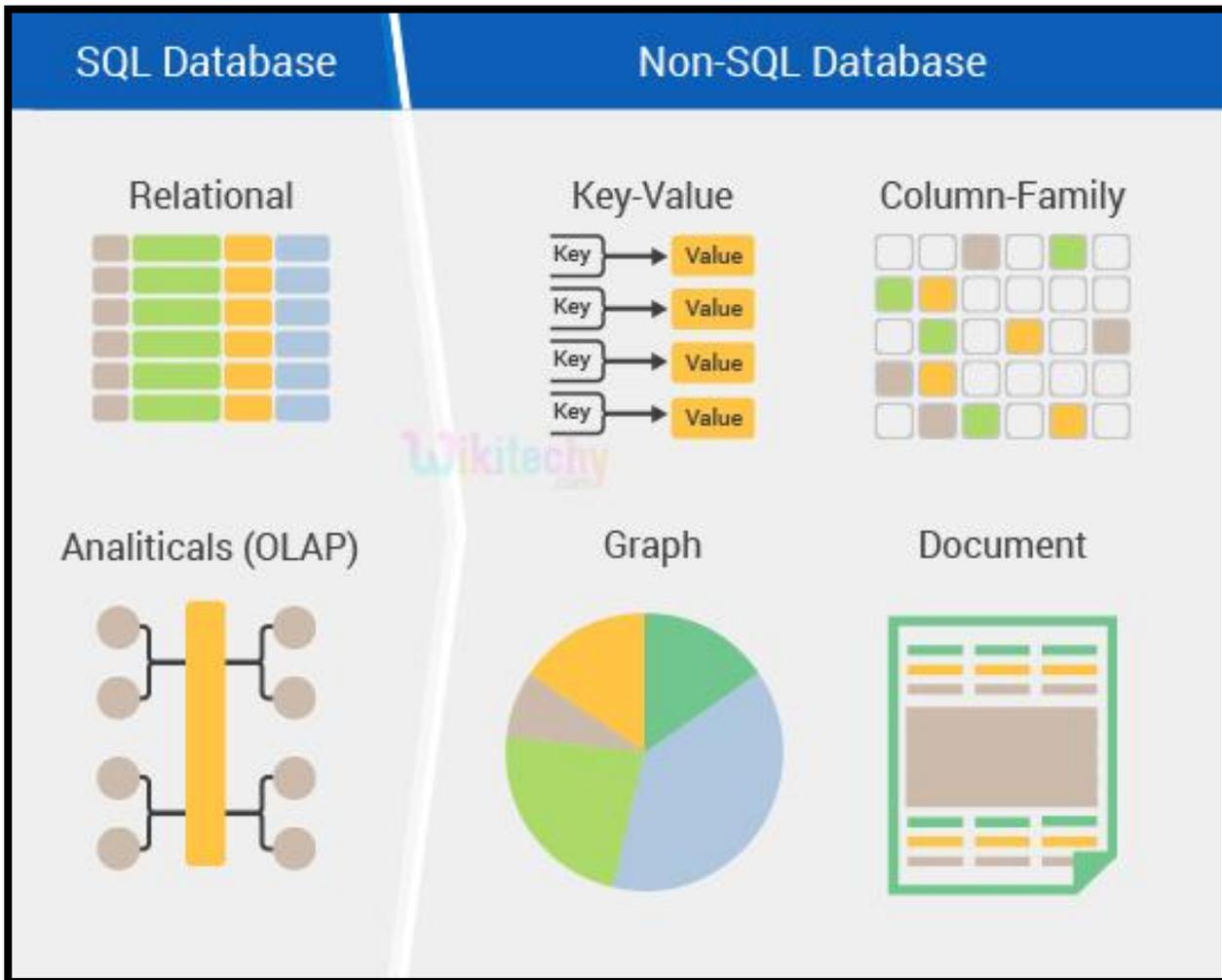




Eliot Horowitz

- ✿ MongoDB is a cross-platform and open-source which is used for document-oriented database, a kind of NoSQL database.
- ✿ In mongoDB there is no relational database used.
- ✿ MongoDB is being built on an architecture of collections and documents.
- ✿ MongoDB is considered as the favor to JSON document format that is BSON (binary JSON) with dynamic schemas.
- ✿ So, we can make the integration of data in certain types of applications easier and faster.





- ✱ And the documents comprise of **sets of key-value pairs** and are considered as the basic unit of data in MongoDB.
- ✱ In mongoDB automatic sharding enables data in a collection to be distributed across multiple systems for horizontal scalability, so the data volumes increase.

Document Store Database:

- ✱ In mongoDB the documents are stored in document-oriented approach.





- ✿ A document can contain all the necessary information about the entity. And the document contains subdocuments as well.
- ✿ In RDBMS the string is encoded and stored in a separate table.
- ✿ In mongoDB the Document collection are accessed via unique key.

Key-Value Databases:

- ✿ The simplest type of NoSQL database is the key-value stores in less schema data's.
- ✿ In mongoDB the key can point to any type of data, from an object, to a string value, to a programming language function.
- ✿ So, we can easily store and retrieve data based on a key.

Column Store Databases

- ✿ **Column store databases** stores data in columns within a key space.
- ✿ And the key space is based on a unique name, value, and timestamp. This is similar to the key-value databases.

Graph Store Databases

- ✿ **Graph store databases** are designed for data that can be easily represented as a graph.
- ✿ This means that elements are interconnected with an undetermined number of relations between them.

