

mongoDB

WHAT IS NOSQL?

- NoSQL is an approach different from traditional relational database management systems (RDBMS).
- To define NoSQL,. Relational databases rely on tables, columns, rows, or schemas to organize and retrieve data.
- In contrast, NoSQL databases do not rely on these structures and use more flexible data models.
- NoSQL can mean “not SQL” or “not only SQL.” NoSQL is particularly useful for storing unstructured data.

| Feature | NoSQL Databases | Relational Databases |
|--------------|-------------------------|---------------------------|
| Performance | High | Low |
| Reliability | Poor | Good |
| Availability | Good | Good |
| Consistency | Poor | Good |
| Data Storage | Optimized for huge data | Medium sized to large |
| Scalability | High | High (but more expensive) |

What is MongoDB?

- Open Source NoSql Database.
- Document Oriented.
- Can create document without having to define structure of it first.
- Instead of rows and tables in relational database, MongoDB saves data as documents within collections.
- It was developed and supported by a company named 10gen.

When can you use MongoDB?

- No clear schema definition.
- In relational database adding rows and columns can reduce performance, no such issue present in MongoDB as it is schemaless.
- Write load is high.
- No database administrator
- Environment without reliable connectivity.

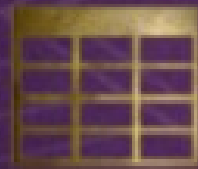


SQL

database



table



row



MongoDB

database



collection

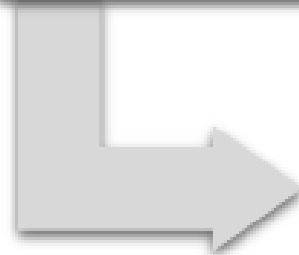


document



MongoDB
database

- Can contain one or more collections



Collections

- Can contain different types of document (objects)



Document

- Key value pair list or array or nested document

Installation

- Windows

- 1) Visit <https://www.mongodb.com/download-center#community>
- 2) Select Windows 64bit/32bit
- 3) Download
- 4) Go to C--> Program Files --> MongoDB --> Server --> 3.4 --> bin
After opening the bin folder, copy the path.
- 5) Right-click on "This PC" and select "Properties"
- 6) Select "Advanced System Settings"
- 7) Select "Enivronment Variables"
- 8) Select "Path" and hit "Edit"
- 9) Hit "New" and paste the path there. Then hit "OK" three times.
- 10) Go to your "C" drive, and create a new folder "data". In that folder, create a new folder named "db".
- 11) Open the CMD and type "mongod"
- 12) Open another CMD window, and type "mongo"

- Ubuntu