

September 9, 2025

[]: Gaurav sen had explained it verywell

nosql

Very fast reads in comparison of sql

Relational

schema is fixed

vertical scale up? Acid Supported Typically require joins

Require ORM

tables

Non Relational

horizontal scale up?

Acid generally not supported, expect in MongoDb Typically dont require joins

Mongodb documents map directly to ds of the languages

vary: document? doubt K v graph

Generaaly these db are according to use case

k v for very fast reads

Easily scalable Flexible fast reads 5. Null null null in sql, no data to be stored in nosql Fast dev

Disadvantages

Relational

Non relational

=> takes lot of storage Update and delete is slow (only reads are fast) => in general don't maintain acid Don't maintain consistency constraints ?

Not when structured data banking app

doubt Whole data need to come vs less data in NOSQL

give example of Different types of nosql database

2. Graph based Fraud detection Neo4j

1. Document based

Mongodb, couchDB

```
yaml
| TransactionID | 1 | 2 | 3 |
|-----|---|---|---|
| ProductName   | A | B | C |
| Quantity      | 3 | 2 | 1 |
| Price          | 30 | 20 | 10 |
| CustomerName  | John Doe | Jane Smith | Sam Johnson |
| Timestamp      | 2023-10-01 09:00 | 2023-10-01 09:15 | 2023-10-01 09:30 |
```

```
yaml
| TransactionID | 1 | 2 | 3 |
|-----|---|---|---|
| ProductName   | A | B | C |
| Quantity      | 3 | 2 | 1 |
| Price          | 30 | 20 | 10 |
| CustomerName  | John Doe | Jane Smith | Sam Johnson |
| Timestamp      | 2023-10-01 09:00 | 2023-10-01 09:15 | 2023-10-01 09:30 |
```