



Till now Relational Database System are the most widely used Database

pre-defined schema

Tabular DB

consistency

id	Name	Phone No.
1	Cody	(234) 235-5678
2	Andy	(154) 483-6583
3	Jedy	(354) 142-7261

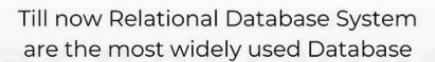
Easy for Computation

predefined, clean data

well optimized

@codechips

▶ Cody



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Now when there are multiple phone numbers?

id	Name	Phone No.	Mobile No.
1	Cody	(234) 235-5678	inc
2	Andy	(154) 483-6583	(555) 555-1234
3	Jedy	(354) 142-7261	IBE

alter table



or have them in seperate tables

id	Name	
1	Cody	
2	Andy	
3	Jedy	

Name	Phone No.	Mobile No.
Cody	(234) 235-5678	
Andy	(154) 483-6583	(555) 555-1234
Jedy	(354) 142-7261	PART

name table

phone number table

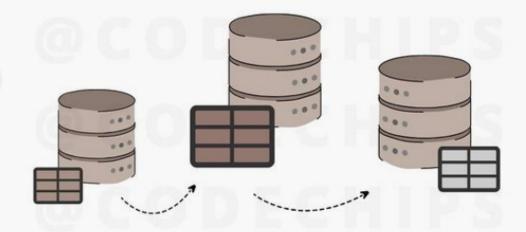
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But there are few things these popular DB's faced

Sometimes applications cannot have predefined schema, so it can't be represented in terms of RDBMS



These dbs are stored in multiple servers and maintaining relations between them makes the reading process slow and hard to scale, making it less flexible

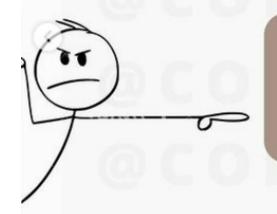
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So they came up with No-SQL system that is much more flexible and faster

Non SQL or Not Only SQL



Note: NoSQL DBMS is not a replacement for RDBMS, rather is it to support the gaps found in RDBMS while dealing with big data

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MongoDB

MongoDB is a No-SQL system. So rather than having row oriented storage, it has document oriented storage

Document in MongoDB is much like JSON

Database



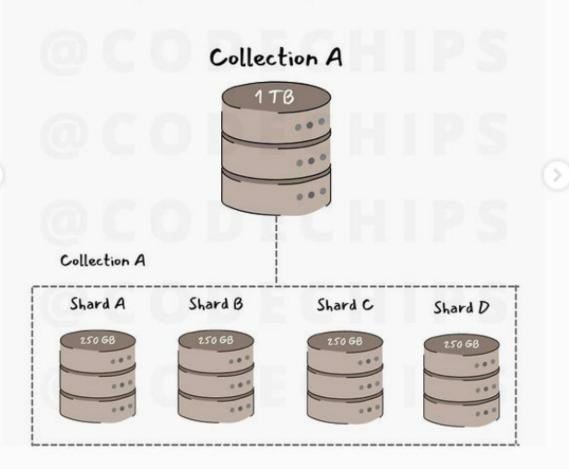
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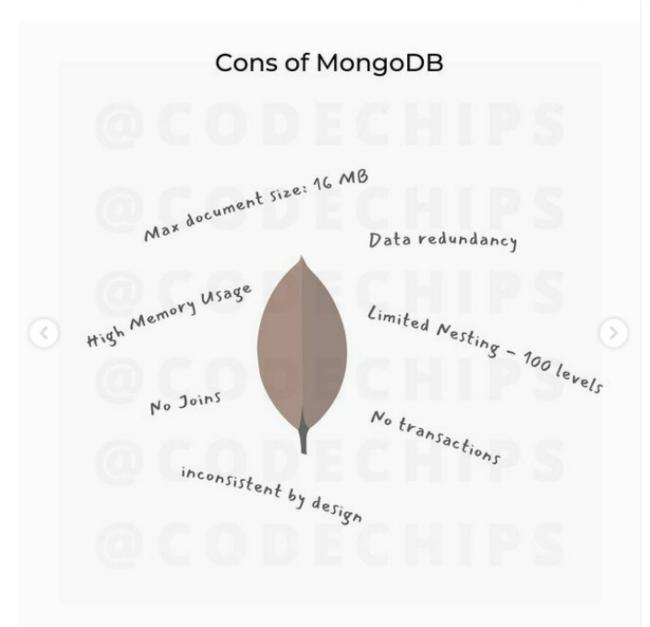
MongoDB data are stored in **self-contained** JSON-like documents that are **not coupled** relationally, allowing those documents to be easily distributed across **multiple** nodes through **horizontal scaling**.



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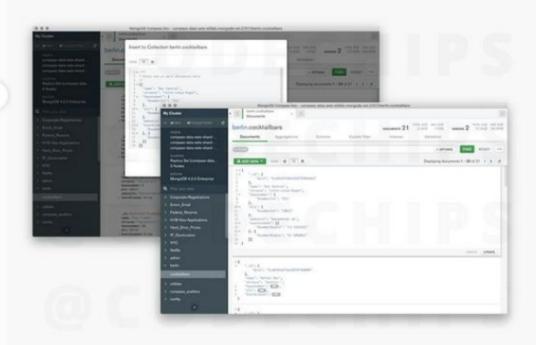






MongoDB Compass is a GUI for MongoDB.

It is an interactive tool for querying, optimizing, and analyzing your MongoDB data



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