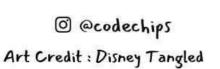


### WHAT IS

DATABASE



@codechips



Cody

popupdev04@gmail.com



## 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







#### Now when there are multiple phone numbers?

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

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	

name table

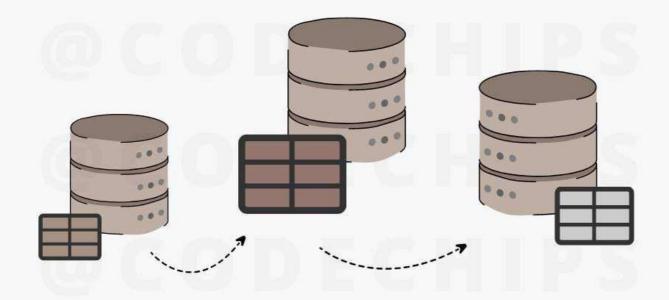
phone number table





# 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

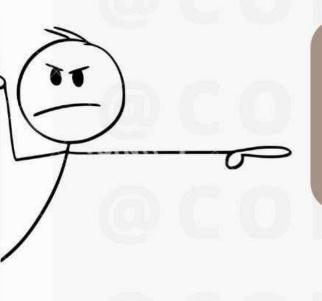


These dbs are stored in multiple servers and maintaining relations between them makes the **reading process slow** and **hard to scale**, making it less flexible



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

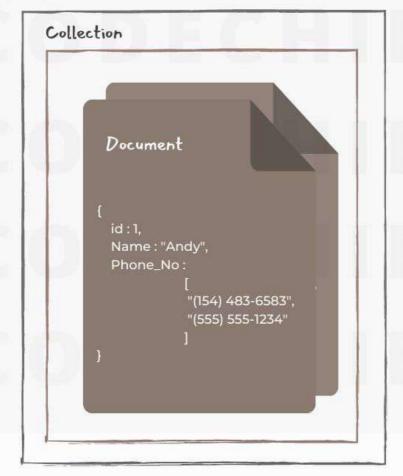


### MongoDB

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

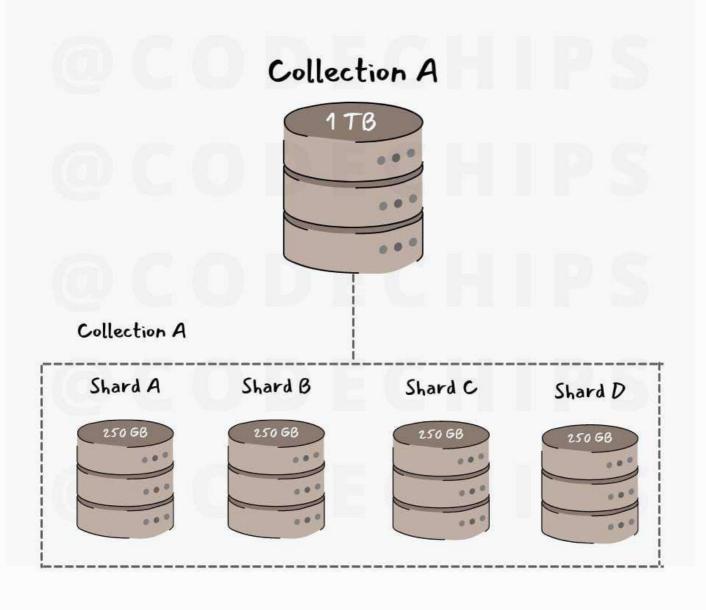
Document in MongoDB is much like JSON

#### Database

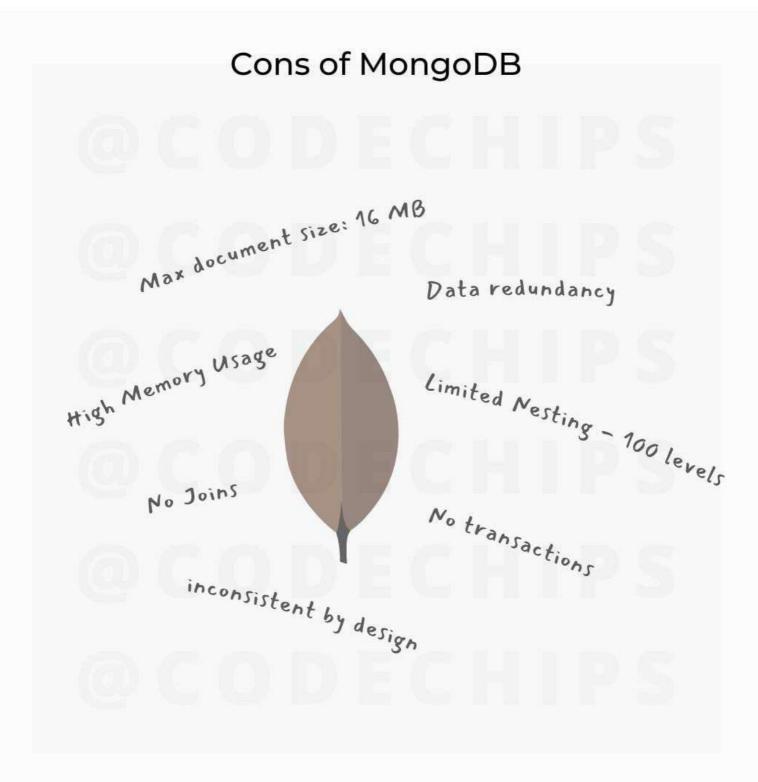




MongoDB data are stored in **self-contained** JSON-like documents that are **not coupled** relationally, allowing those documents to be easily distributed across **multiple nodes** through **horizontal scaling**.









MongoDB Compass is a GUI for MongoDB.

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

