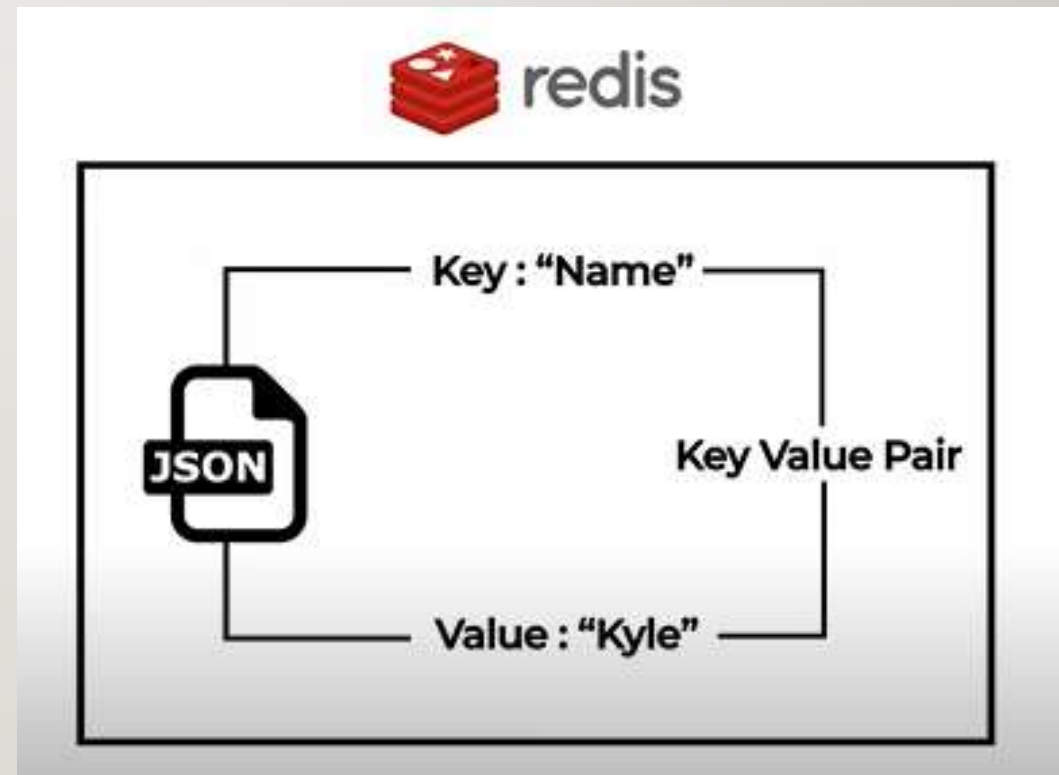# REDIS

NADA MOSTAFA

REDIS (IN-MEMORY DATA STORE)

- Is essentially a type of database and more specifically it is a nosql database

- But it is not very similar to any other nosql dbs it is definitely not similar to mongodb & it's obviously very different than sql db.

- Why?

- Because redis doesn't really have any idea of tables or documents

all the data in redis is stored inside of key value pairs so think about a json obj .

Redis is just like one giant json obj.

INFO ABOUT REDIS

- It's not very good at storing a bunch of structured data like you have in sql

- It's really good for storing individual key value pairs that you need to access or get data from

- another important thing to note about redis is that unlike a normal database that runs on your disk and stores all info in disk

- Redis run inside your working memory (Ram)

- This means that redis is fast because it runs in ram but it's more volatile (unless you are backing it up)

WHY REDIS IS NOT USED AS PERSISTENT DB LIKE MONGODB?

- It's used caching where you access a lot of data that take along time to compute and you store those values inside of redis that way when you need to access them in the future it's incredibly quick since redis in the memory already loaded it's milliseconds to get data

WHEN WE NEED REDIS

- any time that you have a really long or slow query or you have a data you access all the time but doesn't change that much you are going to do is you are going to store that data inside of redis

- If we are going to speed this app up by about 10 to 50 times just by implementing redis

HOW WE CAN INSTALL REDIS

- Is really simple with mac or linux

    - If you are on mac just use homebrew to do the install

    - If you are on linux just use your package manager of choice to install it

- It's a bit more complex with windows

    - You need to do through the widows subsystem for linux

- https://learn.microsoft.com/en-us/windows/wsl/install

BASIC REDIS COMMANDS

- SET name kyle   //set value

- GET name   //get value   "kyle"

- Every thing you store inside of redis is string by default

- SET age 26

- GET age   //"26"

- Redis is smart enough to know this is an integer but it dosen't matter because when you are accessing and dealing with these data . It is always going to come back to you as strings

CONT.

- DEL age
- GET age   //null
- EXISTS name   // 1   1➔ true   0➔false
- KEYS *   //"name"   find all keys
- Flushall   //delete every thing in database
- KEYS *   //(empty list or set)

```
127.0.0.1:6379> SET name kyle
OK
127.0.0.1:6379> GET name
"kyle"
127.0.0.1:6379> SET age 26
OK
127.0.0.1:6379> get age
"26"
127.0.0.1:6379> DEL age
(integer) 1
127.0.0.1:6379> GET age
(nil)
127.0.0.1:6379> EXISTS naem
(integer) 0
127.0.0.1:6379> EXISTS name
(integer) 1
127.0.0.1:6379> KEYS *
1) "name"
127.0.0.1:6379> flushall
OK
127.0.0.1:6379> KEYS *
(empty list or set)
127.0.0.1:6379>
```