NOSQL DATABASES

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Introduction to NoSQL

- NoSQL stands for Not Only SQL.
- It is one of the another type of data storage that is used to store huge amount of data storage like data in facebook (which keeps on increasing day by day).
- NoSQL is a non-relational database management system (sometimes called as derived from relational database), fast information retrieval database and is portable.

Characterstics of NoSQL

Although there are different ways that can be incorporated to understand how NoSQL databases work, we will now look at some of the most common features that define a basic NoSQL database :

- Complex-free working.
- Independent of Schema.
- Better Scalability.
- Flexible to accommodate.
- Durable.

Advantages of NoSQL:

There are many advantages of working with nosql databases such as mongodb .The following are advantages of NoSQL database :

- High scalability
- High availability

Disadvantages of NoSQL:

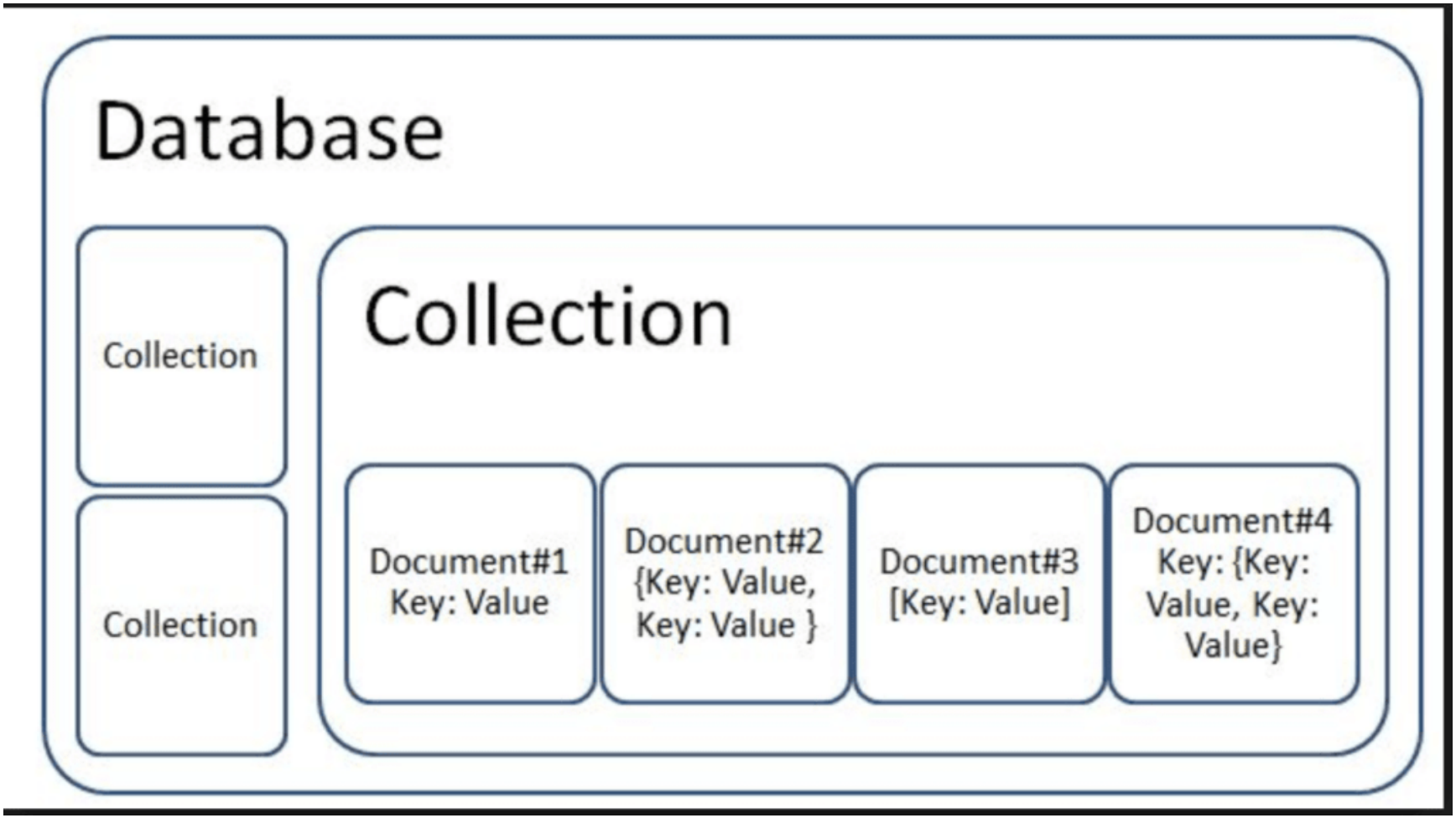
NoSQL has the following disadvantages :

- Narrow focus
- Open-source
- Management challenge GUI is not available.
- GUI mode tools to access the database is not flexibly available in the market.
- Backup.
- Large document

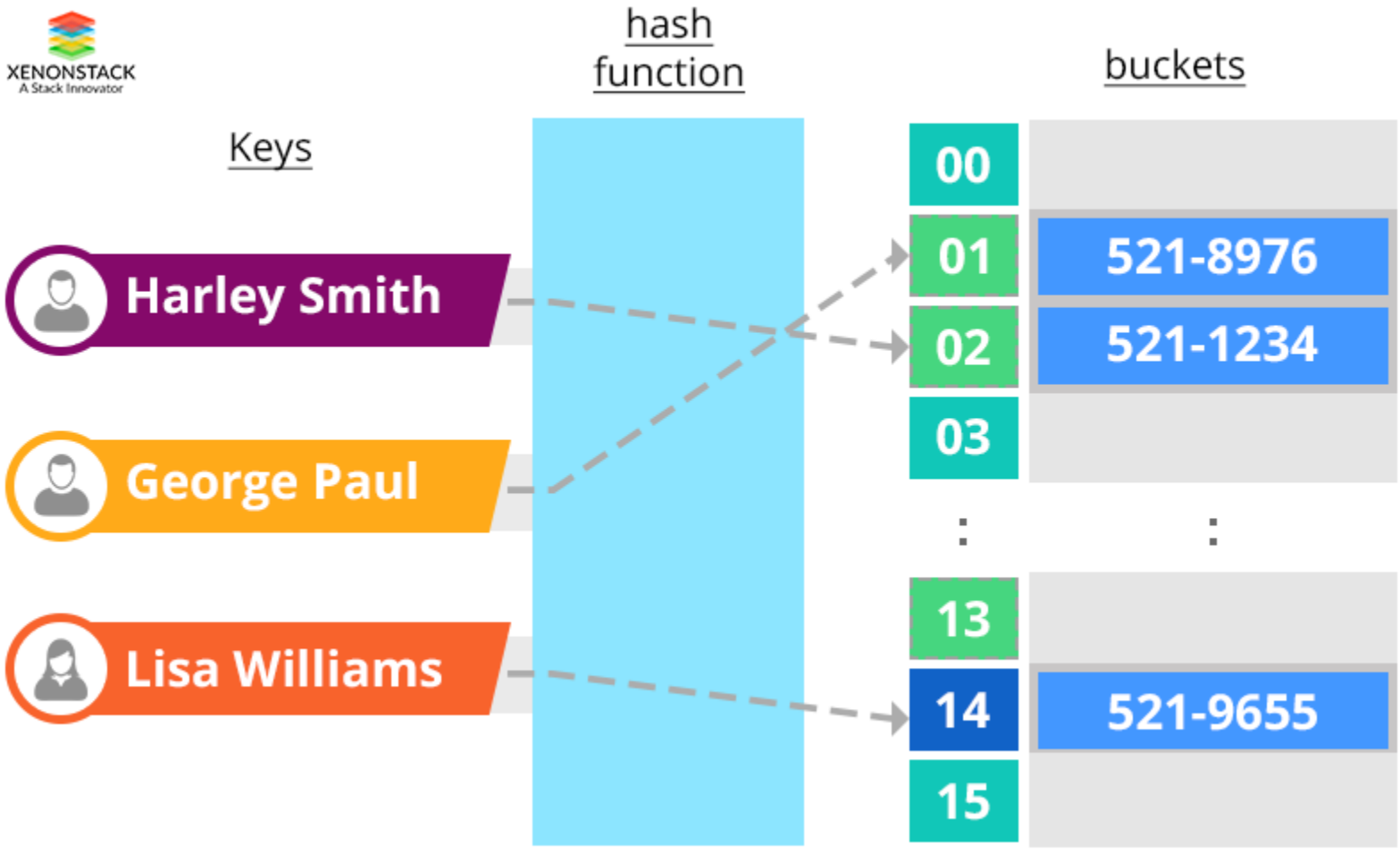
Types of NoSQL Databases

- Document Database.
- Key-Value Database.
- Column-oriented Database.
- Graph Database.

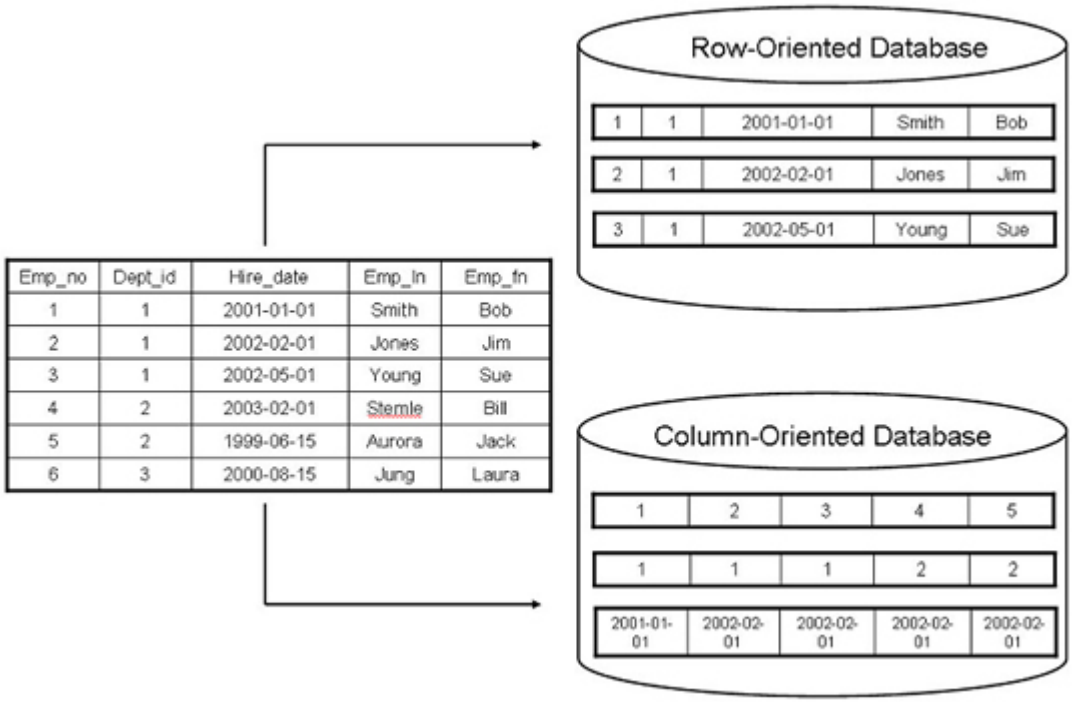
Document Based Database.



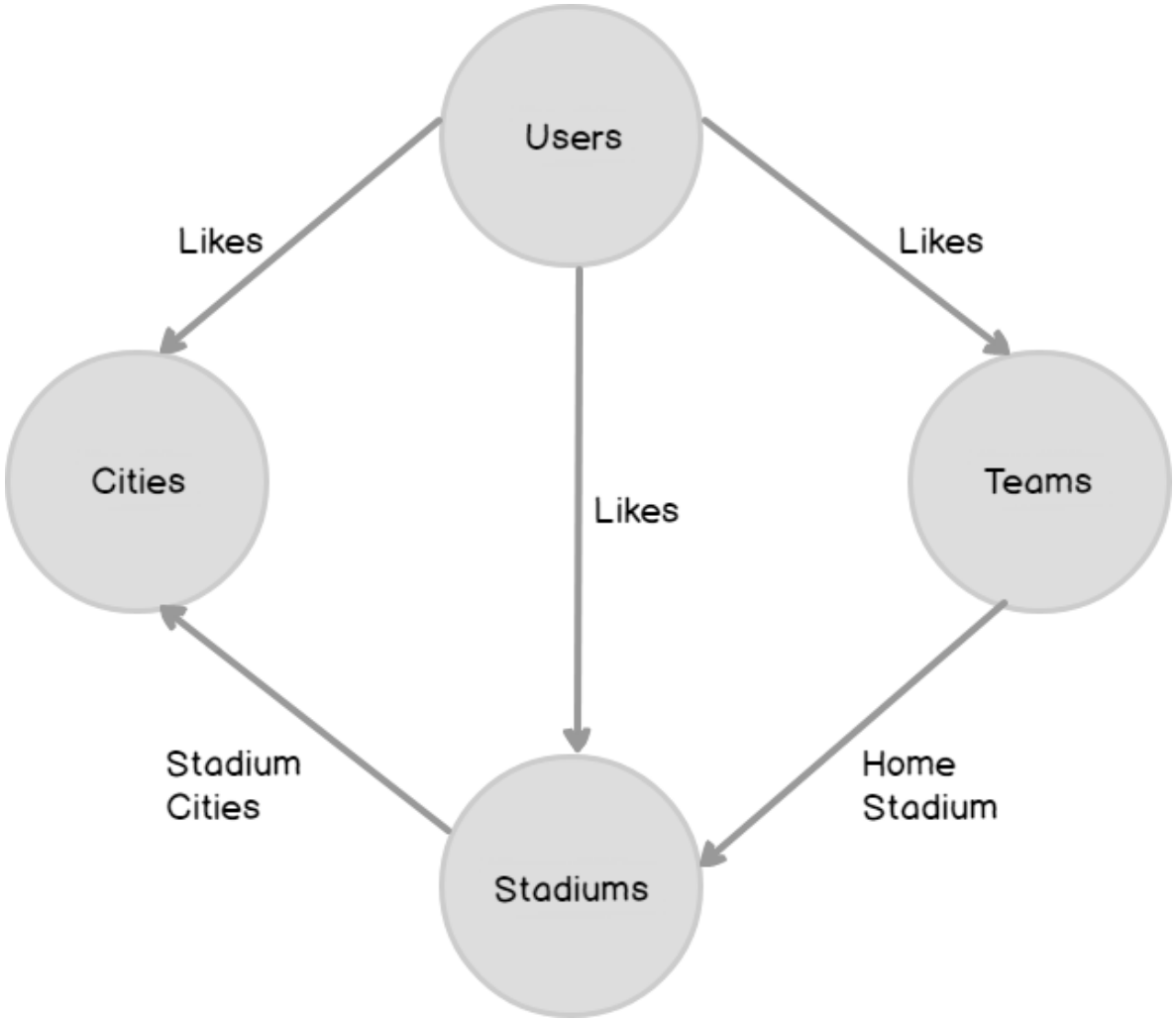
Key value Database



Column-oriented Database



Graph Database.



Applications of NoSQL Databases

- Data Mining.
- Social Media Networking Sites.
- Software Development.

When should NoSQL be used:

- When huge amount of data need to be stored and retrieved .
- The relationship between the data you store is not that important
- The data changing over time and is not structured.
- Support of Constraints and Joins is not required at database level
- The data is growing continuously and you need to scale the database regular to handle the data.

SQL vs NoSQL ?

- Type.
- Scalability.
- Structure.
- Property Followed.
- Support.

Conclusion.

- To sum up, there are plenty of NoSQL databases out there to assist in data mining for one purpose or the other. However, a true NoSQL database is identified by its features like scalability, flexibility, and efficiency to accommodate data.
- Even though NoSQL databases are of 4 types - document, key-value, column-oriented, and graph, they are majorly non-relational databases that help in data storage of usually large amounts of data.