

# NoSQL Database

# What is NoSQL Database

- NoSQL = "non-SQL" or "non-relational"
- Doesn't use SQL to operate database
- Have different structure (Non-tabular)

# Types of NoSQL database

- Document Oriented Database
- Key-Value Database
- Column Families Database
- Graph Database
- Search Database
- Time Series Database
- Dan lain-lain

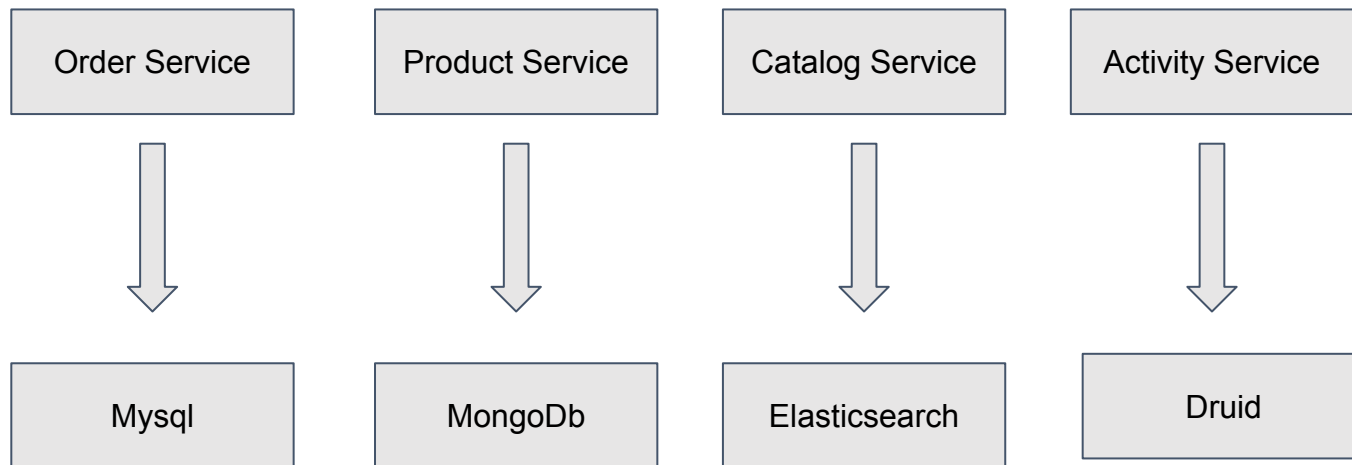
# NoSQL database Examples

- Document Oriented Database = MongoDB
- Key-Value Database = Redis
- Column Families Database = Cassandra
- Graph Database = Neo4J
- Search Database = Elasticsearch
- Time Series Database = Druid, Influxdb
- Dan lain lain

# Why we use NoSQL Database

- To optimize spesific data storage functions.
- Alternative for RDBMS

# Real Case Example



# MongoDB

# What is MongoDB

- MongoDB is one of the most popular document-oriented databases under the banner of NoSQL database. It was developed from an idea in 2007 and its first version was released in 2010. It is developed and maintained by MongoDB Inc.
- It employs the format of key-value pairs, here called document store.



# MongoDB VS Mysql

## MongoDB

- no restrictions on schema design
- Not use SQL

## Mysql

- in MySQL, you need to clearly define tables and columns and also, every row in the table should have the same column
- Using SQL

# MongoDB Term VS Mysql Term

SQL Terms/Concepts	MongoDB Terms/Concepts
database	database
table	collection
row	document or BSON document
column	field
index	index
table joins	\$lookup, embedded documents
primary key	primary key