

Database – a collection of data organized in a way that allows easy access, management, and manipulation. The data is stored in a structured format, typically in tables, and is accessed using a query language. Databases are used to store and retrieve information in a systematic and efficient manner. They are essential for applications that require data storage and retrieval, such as web applications, mobile apps, and enterprise systems. Databases can be categorized into different types based on their architecture and the way they store and manage data. Some common types include relational databases, NoSQL databases, and graph databases.

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NoSQL (Not only SQL) – a type of database that does not use the traditional SQL query language. Instead, it uses a variety of other query languages, such as JSON, XML, and key-value pairs. NoSQL databases are designed to handle large volumes of data and are often used in distributed systems. They are typically more flexible and scalable than relational databases. NoSQL databases can be categorized into different types based on their architecture and the way they store and manage data. Some common types include key-value stores, document stores, column-family stores, and graph databases.

Key-value – a type of NoSQL database that stores data as key-value pairs. The key is a unique identifier for the data, and the value is the data itself. Key-value databases are typically used for simple data storage and retrieval. They are often used in distributed systems and are known for their simplicity and scalability. Some common key-value databases include Redis, Memcached, Riak, Aerospike, and Couchbase.

Wide column – a type of NoSQL database that stores data in wide columns. Each column is a list of values, and each row is a list of columns. Wide column databases are typically used for large-scale data storage and retrieval. They are often used in distributed systems and are known for their scalability and performance. Some common wide column databases include Apache Cassandra, Apache HBase, and Amazon DynamoDB.

Graph – a type of database that stores data as a graph. The graph consists of nodes and edges, where nodes represent data objects and edges represent relationships between them. Graph databases are typically used for applications that require complex relationships between data objects. They are often used in distributed systems and are known for their flexibility and scalability. Some common graph databases include Neo4j, OrientDB, and ArangoDB.

Document-oriented database (Document-oriented database) – a type of NoSQL database that stores data as documents. Each document is a self-contained unit of data, typically in JSON or XML format. Document-oriented databases are typically used for applications that require flexible data storage and retrieval. They are often used in distributed systems and are known for their flexibility and scalability. Some common document-oriented databases include MongoDB, CouchDB, and Apache Kudu. [2].

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CouchDB ? MongoDB [3]

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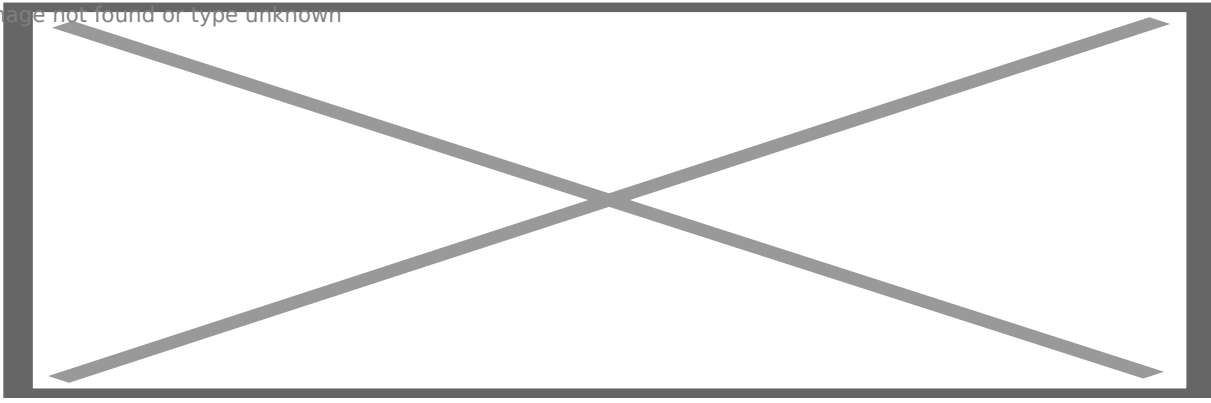
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Image not found or type unknown



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