***Type:* NoSQL (Non-relational) Document-Oriented Database**

***Functionalities:***

\* Stores data in flexible JSON-like documents, allowing for schema flexibility.

\* Scales horizontally by adding more servers to handle increasing data volume.

\* Offers rich querying capabilities with its own query language (MQL) that supports complex filtering and aggregation.

\* Well-suited for storing and managing unstructured, semi-structured, and structured data.

\* Often used for web applications, real-time analytics, and content management systems.

***Type:* Relational Database Management System (RDBMS)**

***Functionalities:***

**\* Stores data in structured tables with a predefined schema (fixed data structure).**

**\* Relies on SQL (Structured Query Language) for data manipulation (CRUD - Create, Read, Update, Delete) and querying.**

**\* Enforces data integrity through ACID properties (Atomicity, Consistency, Isolation, Durability).**

**\* Ideal for storing and managing large volumes of well-defined, interlinked data.**

**\* Widely used for enterprise applications, financial systems, and data warehousing.**

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| **Feature** | **Mongo DB** | **SQL** |
| **Data Model** | **Document-oriented (flexible schema)** | **Relational (tables with fixed schema)** |
| **Scalability** | **Horizontal scaling (adding more servers)** | **Vertical scaling (upgrading existing server)** |
| **Schema Flexibility** | **Highly flexible schema** | **Fixed schema, requires schema changes for updates** |
| **Querying** | **MQL (MongoDB Query Language)** | **SQL (Structured Query Language)** |
| **Data Integrity** | **Eventual consistency** | **ACID properties guaranteed** |
| **Use Cases** | **Unstructured, semi-structured, and structured data** | **Well-defined, interlinked structured data** |