Slide 1: Introduction

* Title: NoSQL vs. SQL: A Comparative Analysis
* Brief overview of MongoDB and SQL
* Introduction to the comparison between the two databases

Slide 2: MongoDB

* Title: MongoDB
* Brief overview of MongoDB:
  + Document-oriented NoSQL database
  + Uses JSON-like documents with dynamic schemas
  + Designed for scalability and flexibility
* Key functionalities of MongoDB:
  + Schemaless data model
  + Horizontal scaling
  + Rich query language (MongoDB Query Language)

Slide 3: SQL (Structured Query Language)

* Title: SQL (Structured Query Language)
* Brief overview of SQL:
  + Relational database management system (RDBMS)
  + Uses tables to store data with a predefined schema
  + Provides ACID (Atomicity, Consistency, Isolation, Durability) properties
* Key functionalities of SQL:
  + Structured data model
  + Vertical scaling
  + Standardized query language (SQL)

Slide 4: Comparison

* Title: Comparison
* Comparison of MongoDB and SQL based on various factors:
  + Data Model:
    - MongoDB: Schemaless, document-oriented
    - SQL: Structured, table-based
  + Scalability:
    - MongoDB: Horizontal scaling, suitable for Big Data
    - SQL: Vertical scaling, may face limitations with large datasets
  + Flexibility:
    - MongoDB: Dynamic schema, easily accommodate changes in data structure
    - SQL: Static schema, requires predefined structure for data
  + Query Language:
    - MongoDB: MongoDB Query Language (MQL)
    - SQL: Standardized SQL query language

Slide 5: Conclusion

* Title: Conclusion
* Summary of the comparison between MongoDB and SQL:
  + MongoDB offers flexibility and scalability for unstructured data.
  + SQL provides a structured approach and ensures data integrity through predefined schemas.
* Considerations for choosing between MongoDB and SQL based on specific project requirements.
* Closing remarks and potential use cases for each database system.

Top of Form