Objective In this checkpoint, you are asked to prepare a presentation where you will compare NoSQL to SQL.

1. Introduction

❖ -SQL vs NoSQL

- SQL stands for Structured Query Language and NoSQL stands for "Not Only SQL"
- SQL is a relational database management system, and NoSQL is a non-relational database management system
- In this presentation, we will compare MongoDB (a NoSQL database) and SQL databases

MongoDB

• What is MongoDB?

- MongoDB is a NoSQL database management system that stores data in JSON-like documents with dynamic schema
- It is highly scalable and flexible, making it ideal for handling unstructured and semi-structured data
- MongoDB uses a query language called MongoDB Query Language (MQL) for data retrieval and manipulation

SQL

• What is SQL?

- SQL is a relational database management system that stores data in tables with a fixed schema
- It is ideal for handling structured data, such as data in accounting systems or inventory management
- SQL uses SQL language for data retrieval and manipulation

Comparison

• Comparison of MongoDB and SQL

- MongoDB is a NoSQL database, while SQL is a relational database
- MongoDB supports dynamic schema, while SQL requires a fixed schema

- MongoDB is ideal for handling unstructured and semi-structured data, while SQL is ideal for handling structured data
- MongoDB uses MQL for querying data, while SQL uses SQL language
- MongoDB is highly scalable and flexible, while SQL has some limitations in terms of scalability and flexibility

Use Cases

Use Cases for MongoDB and SQL

- MongoDB is ideal for handling big data, real-time analytics, and content management systems
- SQL is ideal for handling data in accounting systems, inventory management, and e-commerce websites
- The choice between MongoDB and SQL depends on the type of data being handled and the specific needs of the application or organization.