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Extra Credit

In Data and Analytics, the concepts and applications of NoSQL databases were discussed, and this was integrated through the MongoDB portion of the course. NoSQL databases are databases that do not consist of columns or tables. This means they, in comparison to relational tables, do not store data in the same way. Based on their data model, a NoSQL database comes in different types. A NoSQL database is used to store data in a different format than relational tables. The reason that they've become popular is due to how straightforward and easy it is to understand rather than The data models used by an SQL database. It also allows the structure of data to be directly changed by the developer. In many cases, developers prefer to use NoSQL of SQL. An advantage of NoSQL is how easily the structure of different forms of data can be evolved. It reduces the need for translation because it similarly stores data in a form like how applications utilize objects. Another advantage it has over SQL is the larger scale of traffic NoSQL can handle and manage. Most of the SQL databases use a scale-out strategy that "Provides an easy alternative to scaling the amount of traffic a database can handle." (What) Another advantage is that new application paradigms are very easily supported. Both transactional and analytical workloads from the same database are allowed by the scalability of NoSQL. Because NoSQL databases quickly adapted to the automation of the cloud, it's easier on No SQL to deploy databases to the point where it supports microservice. In Data Analytics a chapter on Mongo DB was taught. Mongo DB is a document-based open source NoSQL database. Mongo DB, because its a NoSQL database, is able to process three forms of data; structured, semi-structured, and unstructured data.

Work Cited

“What Is Nosql? NoSQL Databases Explained.” *MongoDB*,
<https://www.mongodb.com/nosql-explained>.