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**NoSQL**

**A brief overview:**

NoSQL is a nonrelational-type database system. NoSQL means “Not Only SQL”, meaning this nonrelational database is used concurrently (although sometimes replaces it). This is not only convenient but necessary with larger datasets, as adding a column in SQL would require millions of transactions and take time, where NoSQL would be instantaneous. Additionally, due to its nonrelational nature, it is extremely compatible with cloud computing, as all the data does not have to be on site. This makes it safer than normal SQL setups as data-outages or server damage would not be detrimental as data could be stored in multiple places with the cloud. There are many different type of NoSQL databases, with four main types which are Key-valued Stores, Column Family Stores, Document Databases, and Graph Databases. Key-valued Stores are implemented when data is complex and not able to be easily modelled. They also are light-weight and are best utilized when write performance of data is essential.

**How topic relates to material covered in class:**

This topic relates to class because we’ve been utilizing SQL to extract information out of databases. NoSQL seems to be the successor or at least next natural step for database management.

**An example of how it has been used/applied:**

Currently NoSQL is possible among most industries, however different NoSQL databases may be used, due to their various structures and configurations. Some widespread reasons for using NoSQL is large datasets or having a large number/frequency of writing data onto the database. Banking tends to use Key-valued Stores or Column Family Stores-type NoSQL databases as Document Databases type does not support transactions, whereas a social media company, like Facebook, might use a Graph Database type because the structure is more of a spider-web and easier to glean useful data, as social media is inherently relational.

Works Cited

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“Where Is NoSQL Practically Used?” *Web Scraping*, 8 June 2014, scraping.pro/where-nosql-practically-used/.