**Basic Comparison of Relational vs. NoSQL Databases**

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**CSD310:A339**

**October 27, 2024**

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Databases are versatile and are used more than the average person may realize. There are relational databases with relationships that come with advantages, such as MySQL. There are also advantages of using NoSQL databases like MongoDB. However, as nice as these databases can be, they come with their downfalls.

A relational database may have “one-to-one, one-to-many, and many-to-many relationship types” (DePaul University, n.d.). This means that no matter what, you will work with “two tables at a time,” known as the primary and parent (DePaul University, n.d.). In one-to-one relationships, a primary entity relates to one parent entity (DePaul University, n.d.). In one-to-many relationships, the primary table is a single table, while the related table can have as many related tables as necessary (DePaul University, n.d.). An example would be a list of directors and their movies. Lastly, many-to-many relationships allow for multiple tables on both sides (DePaul University, n.d.). An example is various actors and crew then listing TV shows, movies, theatre, and genres.

These relational databases have advantages, and so do NoSQL databases. Relational databases benefit from having relationships where information is stored through tables or tables depending on the relationship used. It also means we can execute simple programs using one-to-one relationships while working with more complex relationships like one-to-many and many-to-many. Tables are also easy to read for humans and computers alike. For NoSQL databases, a huge advantage is to get rid of confusing and complex relationships (Study Tonight, n.d.)

MySQL is a popular software that has many features. It is open source, meaning it is free to use for developers (Comeau, 2016, p. 11). MySQL does not face restrictions in size like other available databases (Comeau, 2016, p.11). In addition, it has an extensive range of compatibility, whether with Microsoft, a graphical interface, or other platforms (Comeau, 2016, introduction).

MongoDB is a form of NoSQL database that has its own features. This also means it is a non-relational database. However, it does feature the same one-to-one, one-to-many, and many-to-many relationships as a relational database (Study Tonight, n.d.). A one-to-one relationship consists of one entity on both sides (Study Tonight, n.d.). An example would be one employee in one position at a company, like a CEO. Many to many relationships in MongoDB allows for multiple relationships on each side (Study Tonight, n.d.). For example, many employees may have many assigned tasks that are similar to others in different positions.

Understanding how relationships and relational databases work can help when learning to develop and later into a career in development. Depending on the program, using MySQL or another relational database may be better than a NoSQL one. However, this can also go both ways, so it is best never to rule out one until they are carefully considered.

**References**

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