In a relational database, a relationship is an aspect of an object that can be used across multiple instances of an object type. These fall into three types: 1-to-1, 1-to-many, and many-to-many. These are exactly as their name implies. In the case of 1-to1, this means that one instance can only have 1 of these relationships. A good example of this is that one USER can only have one BIRTHDATE. In the case of 1-to-many, one instance can have multiples of the same relationship to a given trait, as in the case of one USER having multiple DEPENDENTs. In a many-to-many relationship multiple instances can share the same relationships of many other instances, such as many USERs who have multiple ROLEs in a company, some of which overlap.

As pointed out by Pedamkar, there are several advantages to relational databases. A relational database is a simple model, that is easy to access, and has a high level of data accuracy. These are highly flexible data models, making future modifications easy. Such databases have each field normalized to ensure integrity and accuracy of the table, and even allows for some tables to be flagged as confidential while others are not, increasing the overall security of the database. (Pedamkar, P., 2022)

There are a few disadvantages to this model of database, however. For example, over time a database will grow, forcing developers and programmers to spend more time maintaining it. Then there are the issues with scalability. As the database grows, it becomes more complex, requires more storage, and it can become cumbersome and slow down due to the increase in the data it is holding. Then there is the cost associated with such a database. Not only are you paying for the software, but you usually need to have a technician who is trained in that database program as well. (Akhtar, Z., 2021)

One of the most useful features of SQL, is its syntax. It’s commands such as **Create, Select, Delete**, and **Update** lend themselves to a writing style that is like English sentences. Its columns and tables have long and descriptive names, making the syntax reasonably clear and easy to understand. One example of this is “**Insert into table\_name(column1\_name,column2\_name,.....) values (value1,value2,...);**”

(InterviewBit, 2022) Here we can easily understand that we are telling the program to insert particular values into specific columns in the table.

References:

Akhtar, Z. (2021, August 2). *Relational database benefits and limitations (Advantages & disadvantages)*. DatabaseTown. Retrieved May 27, 2022, from https://databasetown.com/relational-database-benefits-and-limitations/

Pedamkar, P. (2021, March 4). *Relational database advantages: 8 advantages of Relational database*. EDUCBA. Retrieved May 27, 2022, from https://www.educba.com/relational-database-advantages/

*Top features of SQL*. InterviewBit. (2022, February 25). Retrieved May 27, 2022, from https://www.interviewbit.com/blog/features-of-sql/