# DB01: Discussion Board

**Part 1 (Due Wednesday)**

In this modern technology world, why is Data Modeling important (and why is it not)?

Please share your idea with the group with a minimum of 200 words.

Data modeling has advantages and disadvantages depending on the type of database and the kind of data within the database. For a relational database, it is imperative that before you create the database, you create an ERD(entity relationship diagram). This will ensure that anyone who needs to update the database knows how the tables are related. The disadvantage of this model is that once it is created, it is complicated to change tables or add on to them. Adding a column or table increases the database's size and the chance of duplicate data and little or no relation, thereby increasing complexity.

In NoSQL, database modeling is beneficial for document and key, value databases due to information being easier to organize for programmers. Another factor is how they index when a schema is adhered to. A disadvantage of modeling in this instance is that because they scale horizontally, the number of fields that can be added is nearly endless. Possessing the ability to add nearly endless database fields mostly negates the need for a db model other than the primary key for the table.

In summation, modeling is excellent when the database is adequately planned out. It is nearly pointless when trying to gather every bit of information, and not all of the attributes fit neatly into your table. This type of design saves space because of all the NULL values that need not be addressed.

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