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Data vs. Information.

What is the difference between data and information ? An easy example to differentiate the two is using a real life example of a database. Simply put, data can be defined as facts, figures, statistics, or details. Information on the other hand, is data once it is given context. The database I'm going to use as an example is the iTunes Library. The iTunes library takes sound bytes, and organizes them. Without context given to these sound bites, they are merely data. iTunes has a large array of specifics that can be given to the data to turn it into information. The type of file could be a podcast, a song, a video. Once given a type, more specifics come into play. Let's say for example, the sound bite happened to be a song. That song has a time length, artist, album, genre. Now what was only known as a sound bite, is now "Dirty Little Secret" by the All-American Rejects. Its 3:14 long, considered to be alternative rock, and is on their Move Along album. Once the data becomes information, the data can be understood, studied, and enjoyed.

Data Models

The Hierarchical Model is based off of a binary tree with parent (roots) and child(leaves) that descend downward. Some problems with the Hierarchical model are that it has duplicate items, and is a need to know structure. If you altered one of the duplicate items, you would have to alter the other one as well. The network model tried to fix issues with the hierarchical model. It similarly used a binary tree like design, although this model removed the issue of duplicate items. Now, if an item duplicate was altered, the other item would be altered as well. An issue is that not all of the children (leaves) had to be the same type (ex. Player, item shop). As such, this left the model vulnerable to hacks. The model also lacked interactivity. The relational model further tried to fix the issues with the previous models. Rather than being set up like a binary tree, all data is stored in tables of columns and rows. The rows and columns are subsets of the tables. This allowed there to be different tables for different data types (ex. Players, items) and then a table compares the two (ex. inventory).

From the amount of XML that I have seen, it works similar to an array. From this information it probably organizes small amounts of data, or unorganized data very well. Because of this, it seems like a smart model for data storage.

