Jacob Levinson Lab 1

Essay 1

USA Today's Salaries Database contains the year-by-year salaries of professional sports players from a variety of different professional sports. It includes the players of the National Football League, National Basketball Association, National Hockey League, and also players in Major League Baseball. This database takes the data of salaries of each player and puts them into informational categories such as highest paid players, median salaries for each team and total salaries for each team. There is also a feature to search for a specific player by name. The difference between data and information is that information gives context to the data. Data alone is just a number or string. For example, in this context, the data is the salary in dollar amount. Information gives context and organization to the data by explaining what the data is about, who it is about, and comparing it to similar bits of data. Information is valuable because it gives a sort of backstory to the data. Alone the data is a meaningless number or string, however when information is given of what the data means, the data becomes meaningful. On top of this, when data is organized into categories of similar data, it makes it easier for us to compare similarities in the data.

Essay 2

The Hierarchical database model has data organized like a tree. The information is stored in parent/child relationships such that each parent can have many children but each child can only have one parent. The network or pre-relational model is an expanded version of the hierarchical structure. It still has the same parent/child relationships, however rather than limiting the child to one parent it allows multiple parents to each child along with multiple children to each parent. On the other hand, the relational model allows the user to directly state what information they want the database to contain as well as what information they want to be able to access from the database. The database decides itself how it will store the data that the user gives. The database also is in charge of how it retrieves the data the user wants to access. This method of retrieval is invisible to the user. XML as a model for data storage is a linearization of the tree structure. Personally I would rather have the tree structure as it would be easier for me to read then stringing together the tree into a document. For me it would be easier to read a model that is drawn out rather than taking that model and putting into document form.

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