January 20, 2017

Database Management

Lab 1

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1. In today's world there are many databases that are in use, but one database that stood out to me was Marist College itself. Marist has thousands of students, professors, and employees who work on campus throughout the year. They have lists and data regarding everyone that is in the system. From birthdays to housing, to the amount of money someone has paid is all data that Marist has acquired. They have millions of data stored in their networks but it is all just meaningless until given defining characteristics. Once the information is linked to a certain person, it is no longer meaningless data and is information describing a given set of data. For instance let's take myself for example. Let's say Marist has a collection of me involving my birthday, grade level, and address. So this information would read as July 2nd, sophomore, and Pennsylvania. This is all data that cannot narrow down to me specifically. There is a lot of ambiguity within this information currently. But let's say they then put my housing, and name and home address. This new data will narrow it down to me specifically as no one else will have the same address and name as me. Without giving specific context to data, it is meaningless, but once you start to identify and fill in characteristics to the given data, it turns into valuable information.

2. When looking at the relational model, it has become widely used in a vast amount of different ways. Yet before the relational model there were two other well-known models, the hierarchical and network model. These two models basically go hand in hand with a few exceptions, but both models had shortcomings the lead to the creation of the Relational model. In both the

hierarchical and Network they both had to be programmed to enforce rules. The other main problem was that in order to change something within the code you had to go back and recode everything instead of the relational model which only need recoding of one thing. In both cases, the hierarchical and network models were both no flexible enough for us. In regards to the XML model as data storage, I like it as it seems to be good for storage of huge amounts of information. It also seems to be very universal too.