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Data vs. Information

Amazon is a leading website middleman that must have a huge database to be able to sell their products. Some data examples would be the login details of each user: username, password. And they have a huge database of all their products which can be searched through with their search engine. The way Amazon organizes information to data is by adding context to the data. Data is useless without context, so it would just be random strings and numbers that mean nothing alone. But when added context it converts the data to information. Data would be things like 100,20,23,32,53,12. Information would add that these are test grades. It is a lot more meaningful now that that is known! Information is useful for everything, the internet especially and all its websites could not exist without information being spread around.

Data Models

The heirarchial model looks like an upsidedown tree. There are leaf and root nodes. The structure cannot be changed and this is a huge disadvantage. Also in the heirarchial model if you have two of the same data points its possible they will be repeated thusly wasting memory. The network model fixes this but it cannot contain cycles. The relational model we currently use fixes what is wrong about the older models and allows for more flexibility within the data structure. XML is not a good database structure. It is helpful for transfering data but is a bad storage device.