

### Data vs. Information

Data is individual facts which can be organized into information. For example each students grades are data points which can be organized and turned into information by taking the average of the scores.

### Data Models

The hierarchiacal prerelational data model is organized into a tree with parent and children groups. This allows there to be repeated pieces of data, often repeated from parent to child. It collects instances of a specific record and groups them together into record types. These record types are linked in a parent child relatinon with 1 parent and one or many children. A network prerelational data model is different from the hierarchical model in that record types are linked but not always as parent – child. The network model allows for multiple parents. These both fall short of the relational model ,which allows tables to be joined at any time and thus acts as a dynamic system which can compare tables as the need arises. While XML is useful for moving data between databases or from databases to other programs it is not a substitute for a relational database.