



The Encyclopedia of Life database consists of information on 40% of the Earth's 1.9 million species. It has information on the many different behaviors of these animals, such as the nocturnal pattern of the nocturnal lemur. The researchers organize the data into information by gathering it from different sources. They gather information from existing databases, such as the Barcode of Life and Catalogue of Life, then organize it to the respective species. Their goal is to create a single page where the information of a single species can be readily found. Data is collected evidence that is looked at for reference or analysis, for example the swimming pattern of a fish is considered data. On the other hand, information are facts learned about someone or something, such as the data collected from tracking the swimming pattern of a rainbow carp. Data that is not organized and has no context is useless because it does not provide any insight into what is being researched. If data is collected but not organized we would not be able to know more about life and would not be able to evolve. Information provides insight into our lives and helps us gain further knowledge about the world around us.

A hierarchical data model organizes data in the form of a tree. The data is organized by creating links between each one. The hierarchical data model can cause confusion and is slow. This model is not able to model many to many relationships. The network database helps us eliminate duplication and allows us to have one item that can be share. Unlike the hierarchical model, the network model is allowed to have many to many relationships. Unfortunately, the network model cannot be easily updated because it requires adjustments to be made to the pointers. If some of the data is wrongly

changed then it could change the entire model. An XML model seems like a more efficient way of storing data. It allows for many to many relationships unlike the hierarchical model and allows for easy customization.