Abstract

Building a data model using ontology already used in the world. One of the example is to build a drug data model. There are many methods in the construction of an ontology. This final project will analyze the performance of Ontology Development 101 method in the construction of a drug data model in retrieve and update performance. Ontology Development 101 is a method that has a basic concept to build an ontology from the beginning/scratch. Several parameters will having an affect on consistency value of a data model that built like type of model hierarchy, class relation, class property, and the amount of instances that also having an affect on the result of retrieve and data update. According to test, Ontology Development 101 gave a good performance in retrieve and update process, also have a good data scalability. This influented by amount of instance, type of class hierarchy, and class relation.

Key Word : *drug data model, knowledge base, Ontology Development 101, class, instance*