ABSTRACT

The semantic web not only allows data to be understood by humans as a reader but also in order to be processed and understood by machines or computers. Ontology is a semantic web technology that allows it to happen. Ontology describes data on the web and the connectivity between the data on the web. Heterogeneity is a problem that is commonly happened in semantic web ontology, for example there are two ontologies with different names, different structure or defined in different ways although both of them describe the same knowledge. . Ontology matching aims to reduce the problem of heterogeneity in ontology. Ontology matching is a process to compare two ontologies and find the connectivity between two ontology. One of techniques that is used in ontology matching to solve the problem of heterogeneity is by Terminological-based ontology matching (TBOM). Technique of terminological-based ontology matching uses the data from the lexical concepts which is included in the ontology to match the concept by comparing the string (string comparison) so that the ontology matching process produces accurate results in determining the connectivity of two ontology. The TBOM techniques used in this final project is influenced by Similarity Threshold parameter which contributes in terminological-based ontoloogy matching. The similarity threshold parameter gives a great influence on the performance of ontology matching process. The greater the similarity threshold input value, the better the performance of the resulting value or the value of performance approaching one.

***Keywords**: semantic web, ontology, ontology matching, heterogeneity, Terminological-based ontology matching*