

Abstract

Science of technology has grown from time to time, including computer technology. Data searching is a feature that has to exist in data management. But there are several obstacles in the search process as the complexity of searching the data, such as searching a book data written by a particular author. In the web semantics, the relationship between the author and the book is formed and given a specific term to show the relationship between them, so that the result of the data is more precisely targeted. Whereas if without using web semantics, the relation can not be mentioned, only shows the relationship between tables only. Semantic Web is a technique in the science of technology where the machine can function as a more reliable searcher, so the search more understandable by human language and communication with the machine more meaningful and targeted. Semantic Web is a new way of helping computers manage and draw conclusions from data. Through this semantic web data can be organized, and integrated with other information in a simpler way. Various components are used in the process of searching data using web semantics, such as build ontology which then in execution using SPARQL to get the data. Then data is compared to the search process without using web semantics. Furthermore, an analysis was performed whether the process of searching data using web semantics more efficiently than without using web semantics.

Keywords: web semantics, ontology, RDF, SPARQL