Abstract

There is an impending need for an intelligent system to organize the large amount of information currently present in the World Wide Web (WWW). It has become humanely impossible to retrieve, sort and organize the surplus information in the WWW. Semantic web is an evolving extension of the World Wide Web in which web content is organized meaningfully in a structured format using web ontology language (OWL), thus permitting them to find, share and integrate information more easily. This paper presents a methodology to design a self organized system to retrieve information about a particular topic with the pre requisites needed to assimilate the topic that the user is interested in learning and the further readings related to the topic are also listed in the search. For this, a knowledge library for DBMS domain is created using ontology and knowledge management technologies and then a strategy is devised to group the relevant prerequisites and present it to the user in a single search. The effectiveness
of our approach is demonstrated by implementing a prototype and presenting the search results of a particular keyword, its interrelated contents together with the prerequisites and further readings needed to assimilate the particular topic.

**Reference**

- Ig Ibert Bittencourt, Evandro Costa, Marlos Silva, Elvys Soares, 2009, A computational model for developing semantic web-based educational systems, Knowledge-Based Systems Vol 22 , 302-315
- Amal zouaq, Roger Nkambou, 2008, Building Domain Ontologies from text for Educational Purposes, IEEE transactions on Learning Technologies Vol 1, No:1, 49-62

**Index Terms**

Computer Science

Algorithms
Key words

Semantic web          Ontology          Knowledge management
                      E-learning