Abstract

The reason for the growth of e-learning that it provides a convenient and efficient learning environment and practical utilities at anytime and anywhere, so that learners and teachers realize their educational activities with less effort, time and money. In recent years utilization of semantic web techniques for knowledge construction and representation in E-learning gained so much attention. This article presents a system for automatically learning knowledge construction and representation in e-learning which is based on the concept map, RDF data modeling and ontology languages. These concepts can show the mentioned knowledge better and also they convey the meaning. In the proposed method, DBpedia knowledge base is used for extracting learning concepts, also the concept map is applied for creating a graph of concepts and relations between them and editor tools of ontology like protégé are providing a knowledge base of concept map in the format of OWL. The proposed method is developed for creating knowledge base from existing concepts in fuzzy logic domain. Among the advantages of the constructed knowledge base we can mention the meaningfulness, its sharing and reusability in all the learning systems.
References

Knowledge Construction and Representation in E-Learning using Semantic Web Techniques


Index Terms

Computer Science
Information Sciences

Keywords

E-learning Knowledge Representation Knowledge Construction Ontology Semantic Web