Abstract

Learning Objects (LO) represent important elements when using electronic media to deliver educational contents to an audience in a learning environment. Construction of LOs does not involve a simple method, as their nature is directly linked to the intricacies of human cognitive and learning processes. Learning Objects Repository (LOR) not only provides a distributed storage mechanism but also emphasizes on the shareability and reusability of LOs. To ensure reusability and shareability, the metadata has been annotated to help LO discovery. To enhance the annotations in a traditional metadata format, ontological approach is proposed to achieve efficient LOs and to assist users in retrieving LOs. In this paper, new approach is proposed to acquire semantic shareable learning objects to create LOR. This proposed system presents the advantages that facilitate the development of new didactic tools with improved LO retrieving, integration and building capabilities. The experiment executed in this research shows that the proposed approach improves LO retrieving in the learning system.


Building Learning Repository based on Semantic and Shareable Learning Objects

Computer architecture education. ACM.

Index Terms

Computer Science  
Information Sciences

Keywords

Learning object repository  Semantic Web  Domain ontology  Semantic learning  Semantic objects  annotation  LO refinement