Abstract

E-Learning is a process in which electronic medium is used to access the defined set of applications and processes. In e-Learning environment, automatic classification of learning materials is essential due to lack of common vocabulary of the knowledge area in some context. Ontology has the potential to play an important role in representing an area of knowledge. This paper proposes ontology to automatic classification of learning materials to the Project Management knowledge area domain. This ontology aims to facilitate the search for learning materials within the given domain. The Project Management Body of Knowledge (PMBOK) was used to define the hierarchical structures of knowledge as it is intended to cover broad area of Project Management. The Rational Unified Process (RUP) was used to add axioms to define the relationships between the main concepts. Two specific examples were designed to show the automatic classification of learning materials. Experiments were performed using the OWL reasoner Pellet and editor Protégé 4.2 alpha version. The results of our performance evaluation show that the ontology is able to classify and locate learning materials from the Project Management area, according to the desired area, role, artifact and activity.
References


Index Terms

Computer Science
Software Engineering
Keywords
Ontology  PMBOK  RUP  Project Management  Protégé 4.2 alpha