Abstract
Knowledge can be captured and made available to both machines and humans by an ontology. Ontology can be served as a structured knowledge representation scheme, capable of assisting the construction of a personalized learning path. This paper describes the processes of conceptualization and specification, or building of, an ontology. The domain for which the ontology has been constructed is software risk identification. The required concepts, the semantic description of the concepts and the interrelationship among the concepts along with all other ontological components have been collected from various literatures and experience of the people from software industry. From which, a taxonomy has been constructed by using the property ‘isA’ and the design architecture for the required ontology has also been sketched out manually with nearly four different types of properties. In order to reduce implementation efforts, the Protégé platform, a scalable and integrated framework for ontological engineering, has been used to construct the ontology. The constructed ontology has been represented in owl format, which makes it more machine understandable. Then the semantic representation of the knowledge has been made using the OWL document generator, which automatically generates a set of documents from the ontology. In order to understand the knowledge in more detailed way again the ontology has been visualized using ontoviz tool.

Reference

- Ling Jiang, Chengling Zhao, Haimei Wei, 2008. The Development of Ontology-Based

**Index Terms**

Computer Science  Wireless
Key words

Ontology
Software Risk Identification Ontology (SRIONTO)
Knowledge Management
E-learning
OWL
Visualization

Protégé