Abstract

Currently, the Web is primarily composed of documents written in HTML. Information on the web is designed for human consumption. Retrieval of information on web is mostly restricted to keyword searches. This limitation may be overcome by semantic web which is an intelligent and meaningful web proposed by Sir Tim Berner Lee. Ontology is the structural framework in semantic web and plays crucial role in information exchange, knowledge reuse and provides reasoning capabilities for human and machines. Ontology is a set of concepts and the relationships that exist between those concepts. Components of ontology are individuals, classes and properties. Protégé along with DL Query helps to create a consistent ontology and conduct reasoning based on the concepts and relationships from the domain knowledge. This paper explains the use of Protégé 4.0 to create OWL ontology for Vitamin A and its effects on humans. This ontology represents information about Vitamin A and its effects on humans, Personal factors influencing such effects, and dietary sources which are responsible for these effects. It also infers groups of people who are vulnerable to vitamin A inadequacy. This paper also illustrates the usefulness of ontology in the creation of "web of data".
Ontology based Semantic Querying of the Web using Protégé

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Index Terms

Computer Science
Information Sciences

Keywords
Protégé  OWLViz  DL Query  Semantic web  Ontology