Abstract

Nowadays, the proliferation of geographic information systems has caused great interest in geographical ontologies. Geographical ontologies have been introduced to facilitate knowledge sharing and to assist in recognizing spatial terms employed in a query. In this research the full model of the Nile River geographical ontology has been developed to meet the needs of the recognition of the terminologies and the semantic relationships between geographical terms related to Nile River. It will enable search engine to perform a spatially aware search with providing support for query disambiguation, query expansion and relevance ranking which will result in the retrieval of relevant web resources. The proposed design of Nile River ontology model has been developed based on the analyzing and finding relations between different parts of Nile River. Then the model has been implemented using protégé tool, the related data has been collected and finally the system has been tested.
Mathematical Formulation for the Nile River Geographical Ontology


Index Terms

Computer Science  Information Sciences

Keywords

Nile River ontology  OWL  Semantic Web  protégé