Semantic triple ranking based on levenshtien reverse engineering approach

ABSTRACT

In sematic Web data are represented in Resource Description Framework (RDF) in triple format (Subject, relation, Object) and retrieved using structured query such as SPARQL. These structured queries require complex syntax to formulate. In view of this therefore, several approaches have been researched to enables semantic formulation of natural language to structure query. The process involves the representation of natural language query to structured triple format. However, dues complex nature of natural language, one natural language query may have more than one possible triple format; therefore an effective semantic triple ranking framework is needed for semantic triple ranking. In this study, semantic triple ranking mechanism is proposed. The approach is based on using levenshtien string matching algorithm a reverse engineering approach. The result of the proposed triple ranking has increased precision to 0.04 and recall 0.06.

Keyword: Concept; Information retrieval; Predicate; Quran ontology; Semantic web; Triple