ISWSE: Islamic Semantic Web Search Engine

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Abstract

Despite the enormous number of documents and the huge amount of information contained in the Internet, the information search process is still difficult and unsatisfactory. The main reason behind this is that the search engines use the traditional search which depends on the keywords not on the concepts as semantic search engines. Tim Berners-Lee invented the Semantic Web in 2001 and until now many researches about semantic web search engines have appeared, however the Semantic Web researches in Arabic language are still few especially with regard to the Islamic information domain. Total number of Muslim countries is about 57 countries and a population of Muslims around the world is about 1.62 billion by more than 23% of the world's population. This large number believes on one book (The Holy Quran) and needs to retrieve information from it accurately and easily. The Holy Quran, which God revealed to the Prophet Muhammad as Muslims believe, has been worshipped for 1,400 years. The Holy Quran is written in the classical Arabic language. This ancient language has undergone a lot of modifications. For this reason, the Holy Quran became not fully understood by the majority of Muslims. To solve this problem, we present in this paper, the ISWSE as an Islamic Semantic Web Search Engine which searches in the Holy Quran. The proposed system is based on Islamic Ontology and uses Azhary as a lexical ontology for the Arabic language. The paper also introduces experimental results and performance evaluation for the proposed system.


References

- Swoogle search engine, available at: http://swoogle.umbc.edu/
- Hikmat Ullah Khan, Syed Muhammad Saqlain, Muhammad Shoaib and Muhammad Sher, "Ontology Based Semantic Search in Holy Quran", International Journal of
- Protégé, http://protege.stanford.edu/

**Index Terms**

Computer Science  
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**Keywords**  
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