Improvement of Semantic Search Results with Providing an Updatable Dynamic User Model

Volume 155

Number 4

Year of Publication: 2016

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Abstract

The current generation of search engines is severely limited in its understanding of the user's intent and the Web's content and consequently in matching the needs for information with the vast supply of resources on the web [10]. The search engines are evolving from the keyword matching search in general to conception match search personalized by user. In this article, is tried to use the semantic search engines to improve the efficiency level of personalization process. Since the general problem in the search results produced by semantic search is the overload information and the mismatch between the results and corresponding requirements needed by the user, so there is an attempt to troubleshoot the problems by applying user model to some extent. The research project at hand is oriented to collect personalized data to be displayed and create the user model. Models create a structure to display the information on the basis of the user's priorities. The initial step to develop a user modeling is to collect and compile user's interests. In this paper, is studied how to infer a user's interest from the user's search context and use the inferred implicit user model for personalized search.
The main focus in this research, is on the improvement of the efficiency of the results produced by the semantic search of updated user model. Since the low efficiency of personalized processes by the user model is due to low level factors and components by which user model is built up and the algorithm by which the model is updated, so in this research is tried to improve the efficiency of user models by investigating and modifying these cases and as a result, the improvement of search results. This paper presents to research fields of user model and semantic search and also it attempts to show how recent semantic research procedures in web development can intermingle with modern technologies of user model. Some experiments were carried out to evaluate the suggested procedures for user profile and the results showed some improvement in the user's satisfaction when the user used their profiles to personalize the results from semantic search.

References

workshop on Ontologies and Information Sharing, 44–52.


Index Terms

Computer Science

Information Sciences

Keywords

Semantic search; implicit user model; Ontology; personalized search; user search history.
Supported by Turkey BIDEB program.