



PERSONALIZED WEB SEARCH WITH USER'S PROFILE IN RE-RANKING

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ABSTRACT

Archetypal search engines are important for retrieving pertinent information from web. However these engines follow the "one size fits all" model which is not suitable to individual users. This paper is an attempt to get better personalized web search. User's Profile provides an important input for performing personalized web search. Personalized web search is an important field for tuning the beliefs IR system for focused information retrieval. This paper proposes a framework for constructing an Enhanced User Profile by using user's browsing history and enriching it using domain knowledge. In this paper we have used the Enhanced User Profile specifically for suggesting pertinent pages to the user. This Enhanced User Profile can be used for improving the performance of personalized web search. The experimental results show that the suggestions provided to the user using Enhanced User Profile are better than those obtained by using a User Profile.

Keywords: Personalized web search, Profile, Domain knowledge, DMOZ directory.

1. INTRODUCTION

With the growth of World Wide Web, web search engines have contributed a lot in finding information from the web. They help in searching information on the web robust and easy. But there is still room for improvement. Current web search engines do not consider particular needs of user and serve each user equally. Archetypal search engines are following the "one size fits all" model which is not suitable to individual users. It is difficult to let the search engine know what we the user actually wants. When different users give same query, same result will be returned by a typical search engine, no matter which user submitted the query. This might not be purloin for users which require different information. While searching for the information from the web, users need information based on their interest. For the same keyword two users might require different piece of data. This fact can be explained as follows: a biologist and a programmer may need information on "virus" but their fields are entirely different. Biologist is searching for the "virus" that is a micro-organism and programmer is searching for the malicious software. For this type of query, a number of documents on distinct topics are returned by Archetypal search engines. Hence it becomes difficult for the user to get the pertinent content. Moreover it is also time consuming. Personalized web search is considered as a promising solution to handle these problems, since different search results can be provided depending upon the choice and information needs of users. It exploits user information and search context to learning in which sense a query refer. In order to perform Personalized Web. search it is important to model User's need/interest. User profiles are constructed to model user's need based on his/her web usage data. This Enhanced User Profile will help the user to retrieve concentrated information. This paper proposes architecture for constructing user profile and enhances the user profile using background knowledge. It can be used for suggesting good Web pages to the user based on his

search query and background knowledge. Demolition of user profile is an important part for personalized web search. The paper is organized as follows: Section 2, gives there late work focusing on personalized search systems. Section

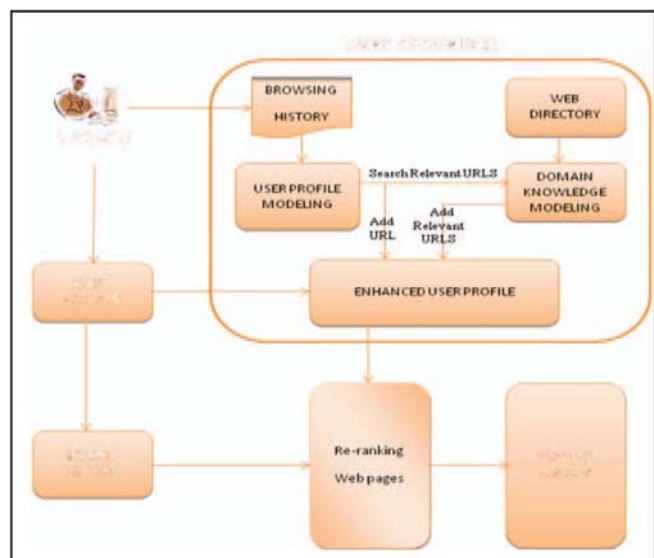
3, proposes the framework for personalized web search that satisfies each user's information need by enhancing the user's profile without user's strain. Next section, we presents the experimental results for evaluating our proposed approaches. Finally, we conclude the paper with a summary and directions for future work in following sections.

2. WORKING

We propose a framework for personalized web search which considers individual's interest into mind and enhances the beliefs web search by suggesting the pertinent pages of his/her interest. We have proposed a simple and efficient model which ensures good suggestions as well as promises for effective and pertinent information retrieval. In addition to this, we have implemented the proposed framework for suggesting pertinent web pages to the user. Our system considers user's profile (based on user's web log l navigation browsing history) and Domain Knowledge in order to perform personalized web search. Using a Domain Knowledge the system stores information about different domain/categories. Once the user inputs query, the system provides good hints for personalized web search based on enhanced user profile Information obtained from User Profile is classified into these specified categories. The learning agent learns user's choice automatically through the analysis of user navigation/browsing history, and creates/updates enhanced User Profile conditioning to the user's most recent choice.. Further our model makes good use of the beneficial of popular search engines, as it can re-rank there



3. ARCHITECTURAL DIAGRAM



4. REQUIREMENT

Software Requirement

Operating System	: Windows
Technology	: Java and J2EE
Web Technologies	: Html, JavaScript, CSS
Tool kit	: Android Phone
Database	: My SQL
IDE	: My Eclipse
Web Server	: Tomcat
Java Version	: J2SDK1.5

Hardware Requirement

Hardware	: Pentium
Speed	: 1.1 GHz
RAM	: 1GB
Hard Disk	: 20 GB
Floppy Drive	: 1.44 MB
Key Board	: Windows Keyboard
Mouse	: Button Mouse
Monitor	: SVGA

5. ADVANTAGES

Personalized web search is considered as a promising solution to handle these problems, since different search results can be provided depending upon the choice and

6. CONCLUSION

In this project, we have proposed a framework for personalized web search using User Profile and Domain Knowledge. Based on the User Profile and the Domain Knowledge, the system keeps on updating the user profile and thus builds an enhanced user profile. This Enhanced user profile is then used for suggesting pertinent web pages to the user. The proposed framework has been implemented by performing some experiments. These experiments shows that the performance of the system using enhanced user profile is better than those which are obtained through the simple user profile. Our work is significant as it improves the overall search efficiency, catering to the personal interest of the user's. Thus, it may be a small step in the field of personalized web search. In future this framework may be applied for re-ranking the web pages retrieved by search engines on the basis of user priorities. We may also apply collaborative filtering for personalized web search in our framework.

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