

## Personalized Web Search Based on User Interest and Web History

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**Abstract:** In recent days, generic search engines are used to retrieve relevant information from web but it is very difficult for user to get appropriate information from web, because number of links on distinct topics is returned by generic search engine, which is not specific. Also it is time consuming. So, proposed system has architecture for constructing user profile and enhances the user profile using background knowledge. The enhanced user profile help the user to retrieve specific information and suggest good web pages to user based on his search query and background knowledge. The proposed system having a framework for personalized the web search using, user profile and domain knowledge that keeps on updating the user profile and hence builds an enhanced user profile also it is used for suggesting relevant web pages to user.

**Keywords:** Attribute-User Profile, Enhanced User Profile, User Modelling, Domain Knowledge, Personalized Web Search.

### I. INTRODUCTION

Web search engines have contributed a lot in searching information from the web with the development of World Wide Web. They help in finding information on the web fast and easily. But there is still space for improvement. Current web search engines serve each user equally and do not consider specific needs of user. For search engine it is difficult to know what we the user actually wants. Generic search engines are returns the results that are not as per their interests. Same result will be returned by a typical search engine when different users give same query, no matter which user submitted the query. It is not right for the user's who require different information. Users need information based on their interest while searching for the information from the web. Two users might require different piece of information for the same keyword. 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 microorganism and programmer is searching for the malicious software. The number of documents on distinct topics are returned by generic search engines, for this type of query. Hence it is very difficult for the user to get the appropriate contents. Furthermore it is also time consuming. For this type of query personalized web search[1] is considered as a promising solution to handle these problems, since different types of search results can be provided depending upon the information needs and choice of users.

In order to perform Personalized Web search it is important to model User's need/interest. It is an important for the personalized web search for Personalized web search construction of user profile is an important part. User profiles

are constructed to model user's need based on his/her web usage data. This paper design an architecture for constructing user profile and enhances the user profile to construct the user profile. From that user profile we are easily constructing the Enhanced User profile using background knowledge. So this Enhanced User profile will help us to retrieve appropriate web pages base on user's interest with the help of user's browsing/navigation history. In this framework for Personalized search engine consists of user modeling based on user past history or application he/she is using. By using this context we are making search more personal as per user past browsing history. This section presents various approaches and the related work which is done in the field of Personalized Web search[1]. In our system considers user's profile (which is based on user's browsing history) and Domain Knowledge in order to perform web search more personalized. The system stores information about different domain/categories using Domain Knowledge[1] Information obtained from User Profile is classified into these specified categories. The representative agent learns user's interest automatically through the analysis of user browsing history, and updates enhanced User Profile conditioning to the user's choice which is more recently used.

### II. RELATED WORK

Rakesh Kumar and Aditi Sharan[1],proposes the framework that includes User Profile and Enhanced User Profile. By constructing an Enhanced User Profile by using user's Browsing History. Results are provided by enhanced user profile are better than those obtained from User Profile. K.W.T.Leung, D.L.Lee and Wang-Chien Lee [2], have proposes the Personalized Web search by busing location preferences. In this paper , content and location concepts has

been separated and organizes them into the ontologies to make an Ontology-based multifacet profile which is recognized by location preference and web history. By keeping the various interest of various user's taken into account. Micro Speretta and S Gauch[3], provides personalized web search by implementing a wrapper around the search site that collect information about search activity of user and builds user profile by classifying collected information. They are used this profile for prioritize the search results as per user interest.

## II. PROPOSED SYSTEM

In this, system are proposes a framework in this framework we are uses easy and simple modules. This system taking individual's interest into account and enhances the traditional web search there by suggesting appropriate pages related to the query. In this system we are uses the Domain Knowledge and user's profile in order to perform the web search more personalized. Representative agent learns the user interest from their web history and navigation history and returns the appropriate web pages to the user as per their interest .Using domain knowledge the system stores the information about their category. As per the user's recent query entered, system returns the result to the user as per their category. In this system is using enhanced user profile[1], re-ranks the pages that are resulting from the search as per user's category. In Fig.1 Architecture of the proposed system is shown .In architecture Domain Knowledge and User Profile also Enhanced User Profile is Specified. Domain Knowledge is used for the user interest in particular domain. User Profile indicates that individual user's interest and Enhanced User profile means filtering of the User Profile. After the Enhanced User Profile system Prioritize the web pages using the user interest.

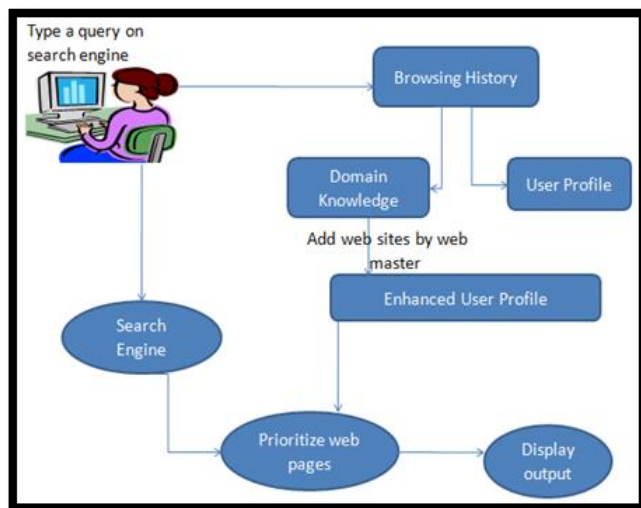


Fig.1. System Architecture.

This project is implementing the Page Rank Algorithm which is used to ranking the pages as per the user's choice. System ranks the pages according to When and how many times the user visit to that particular page using this page proposed system give results to that particular result .System also calculate how many time user spent on the current page after that gives results to the user.

## III. RESULTS AND DISCUSSION

In this, proposed system is making the personalization of the web search. Following example that gives us total scenario of the system.

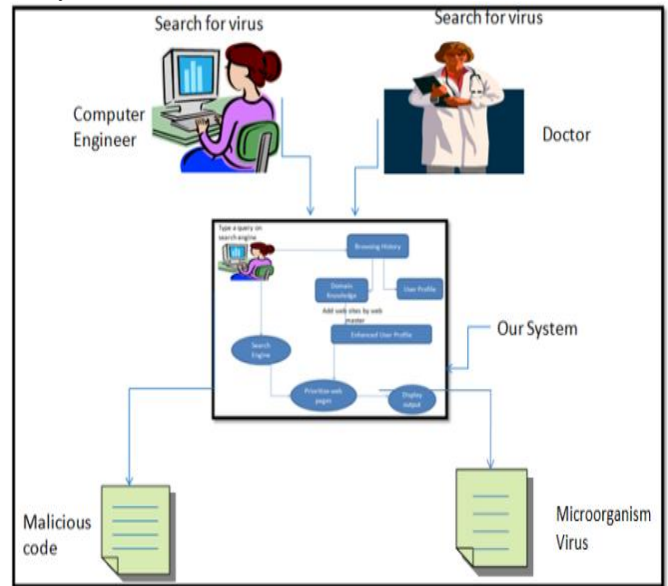


Fig.2. Result of the System.

From above Fig.2 we saw that in what way system provides personalization. In this way system is gives the appropriate result to the user as per their interest. For that system maintaining the history of the individual result.

## IV. CONCLUSION AND FUTURE WORK

This paper, is developing a framework in that system uses User Profile and Domain Knowledge. Using Domain Knowledge system is stores the the information as per their category .This system, is adding different professions as per browsing history of particular user system is find that to which category user is belong after finding that to which category user was system is displaying the results to the user .System is keeps updating the user profile and enhances the user profile to the Enhanced User Profile. In future system is trying for not only retrieve the specified pages by the user's but also system is re-ranking the pages. System is also trying for always keeps updating of Enhanced User profile and try to giving more and more filtered output to the user as per their interest.

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### **Personalized Web Search Based On User Interest and Web History**

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