IJARES/July 2014/Volume-2/Issue-7/1177-1182 **ISSN 2347- 9337**

**INTERNATIONAL JOURNAL OF ADVANCED RESEARCH IN ENGINEERING AND SCIENCE**

# AN EXPOSURE TOWARDS NETWORK RESOURCE ENHANCEMENT BY SEARCH ENGINES

**CH.Yadagiri[1], S.Gayathri Devi[2]**

[1]M.Tech Student, Dept of CSE, RRS College of Engineering & Technology, Muthangi (V), Patancheru (M), Hyderabad, T.S, India

[2]Assistant Professor, Dept of CSE, RRS College of Engineering & Technology, Muthangi (V), Patancheru (M), Hyderabad, T.S, India

**ABSTRACT:**

Search engines are essential tools to retrieve network data resources, and have become one of the most significant network applications. Member search engines are considered as index database concerning meta search engines and are of maximum importance to excellence of results. Meta search engines do not require passing through network, or building up index. Robot based search engines traversal web in a certain approach using software robot, download web documents and build up a huge-scale index. Meta search engines have mainly two ways to obtain result data from individual search engines: one is to gain an interface by purchase or cooperation; the other is to extort contents from their result pages.

***KEYWORDS: Meta search engines, Web documents, Index database, Robot based search engine.***

## 1. INTRODUCTION:

Meta search engines can significantly increase the coverage on network resources and improve user experience. Meta search engines base their services on several individual search engines. They borrow services provided by their member search engines and return the incorporated results. They neither own an index database or a classification directory, which is the biggest difference with individual search engines. Meta search engines are mainly collected by user interface, member search engine selection module, query forwarding module and result integration module [4]. According to information collection and service delivery mode, we mainly classify search

engines into three types: robot based search engines; directories based search engines and meta search engines. Meta search engines do not necessitate passing through network, or building up index. They consist of selection of member search engine, result incorporation, forwarding of query in addition to other algorithms [8]. When measured to robot based search engines, meta search engines encompass greatly lesser technical threshold in preservation. Meta search engines as shown in fig1 have mainly two ways to obtain result data from individual search engines: one is to gain an interface by purchase or cooperation; the other is to extort contents from their result pages [13]. The latter not only has the shortcoming of low effectiveness, but also meets with copyright issues in commercial applications. Long response time is an inevitable disadvantage of meta search engines. Before returning references, meta search engines need to forward users' query request to multiple member search engines, wait for their response and incorporate them, so they consume much more time than an individual search engine [1]. Methods for recovering this disadvantage are: forwarding users' query to member search engines in parallel, reducing the number of member search engines in a retrieve, limiting the number of references and so on. Robot based search engines traversal web in a certain approach using software robot, download web documents and build up a huge-scale index [11]. Upon receiving a query, they retrieve the index database and return results related to the query. Directories based search engines collect web information by artificial collection or website authors' initiative commitment, and organize resources in tree structured directories classified by subject.

## 2. METHODOLOGY:

Search engines are essential tools to retrieve network data resources, and have become one of the most significant network applications [3]. User interface interacts by means of users, make available them through visual query input and outcome output interface. User interface have to be straightforward, and accessible, permit users to precisely put across their information requirements, and make available custom settings for instance number of entries put on view for every page, search scope of language, to fully meet users' preferences [14]. Adjust difference through grammar rules and recovery parameters, meta search

engines make available restricted superior search functions which are wide-ranging to member search engines. Towards getting hold of superior performance, meta search engines have to consider member search engines and prefer the improved ones on particular issue [9]. Member search engines are considered as index database concerning meta search engines and are of maximum importance to excellence of results. Member search engine assortment is supportive to support bandwidth obtainable, dropping response time and getting better user understanding [7]. However it is not simple to decide suitable member search engines due to unattainable documents in support of building index, extensive technical disparity; frequently altering index. There are three schemes for choosing member search engines in general use such as: User selecting where simplest scheme is that allow system make available a possible listing of member search engines as well as users construct individual choices and general users are tricky to formulate rational evaluation [2]. Fixed Members in which the majority of meta search engines take on unchanging members scheme, specifically fixing member search engines devoid of concern of characteristic description. Intelligent Selecting in which an enhanced approach is all the way through assessment of recall, accuracy as well as average response time, allow system mechanically decide member search engines consistent with detailed query [15]. every member search engine encompass its individual system of grammar rules as well as retrieval parameters, consequently meta search engines require to independently alter the query appeal received from user interface to format managed by every member search engine. Subsequently, meta search engines give in altered queries to every selected member. To augment work effectiveness, query forwarding has to be approved in parallel. Meta search engines required to collect returned references as well as return them towards users in a consistent arrangement [12]. Duplication elimination and reference resorting are most important two occupations. Reference resorting, considered as the important expertise of meta search engines, conclude performance concerning meta search engine in a huge extent. For dissimilar member search engines containing dissimilar recovery standards and arrange algorithms, how to build complete usage of relevance assessment effects to precisely way out each

and every reference with relevance and significance is vital issue which meta search engines have to consider [5]. Three distinctive resorting algorithms are Simple Combination which adds on one member search engine 'return reference to an additional one. Round robin is a strategy of interval combination. Initially it arranges member search engines by means of their performance subsequently unite initial references in every reference list sequentially, subsequently unite second, and proceeds [10]. When measured to simple combination, method of round bobbin is additionally realistic and has turn out to be the source of numerous resorting algorithms. Relevance Resorting in accordance with every reference assessment score, position in reference list, performance of member search engine, this scheme calculates comprehensive relevance degree also resorts the references by means of degree [6]. There is a consideration that meta search engines download web documents, work out relevance by means of frequency and arrange references based on computation. we can obtain additional information, confirm existence of references, make sure their significance to client queries, take out abstract and make available some additional functions.

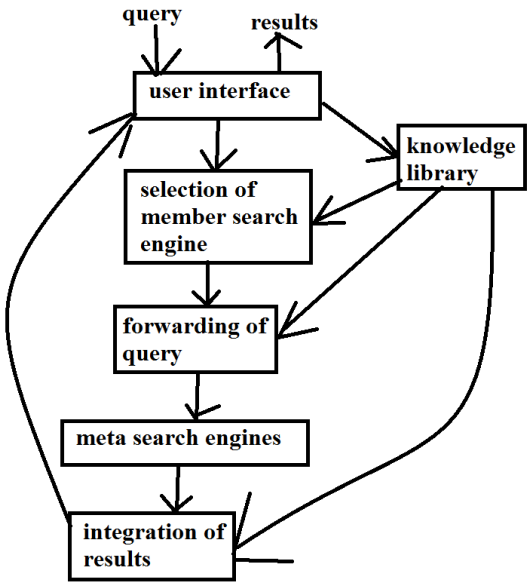


Fig1: An overview of structural design of meta search engine

## 3. RESULTS:

Meta search engines obtain queries of user all the way through a particular user interface, evidently convert user queries and progress in the direction of numerous individual search engines, ultimately return incorporated results. Meta search engines can significantly increase the coverage on network resources and improve user experience. To get hold of superior performance, meta search engines have to consider member search engines and prefer which performs fine on particular issue. To a certain extent, they resolve low recall as

well as low accuracy insufficiency concerning particular search engines and make easy users' use. This is in addition the major benefit of meta search engines. In accordance with exploration report, no particular search engine is capable to return maximum of references subsequently to users. These compel users to give in their queries to numerous search engines in succession until they discover information they require or surrender their recovery desire. When measured to simple combination, method of round bobbin is additionally realistic and has turn out to be the source of numerous resorting algorithms. Wide-ranging user interface and recovery parameters cause much trouble towards users.

## 4. CONCLUSION:

Meta search engines obtain queries of user all the way through a particular user interface, evidently convert user queries and progress in the direction of numerous individual search engines, ultimately return incorporated results. Meta search engines required to collect returned references as well as return them towards users in a consistent arrangement and are mainly collected by user interface, member search engine selection module, query forwarding module and result integration module. Intelligent Selecting in which an enhanced approach is all the way through assessment of recall, accuracy as well as average response time, allow system mechanically decide member search engines consistent with detailed query. Member search engine assortment is supportive to support bandwidth obtainable, dropping response time and getting better user understanding. Meta search engines resolve low recall as well as low accuracy insufficiency concerning particular search engines and make easy users' use and in addition is the major benefit of it.

## REFERENCES:

[1] Yiyao Lu, Weiyi Meng, Liangcai Shu, Clement Yu, and King-Lup Liu (2005) Evaluation of result merging Strategies for Metasearch engines, In Proc. of 6th International Conference on Web Information Systems Engineering (WISE05), pp. 53-66

[2] S.Saba (2002) Information technology for libraries and information agencies: A short history of search engines. Rutgers University. http://www.scils.rutgers.edu/~ssaba/ 550/Week05/History.html.

[3] Javed A. Aslam, Mark Montague (2001) Models for metasearch, In Proc. of the 24th annual international ACM SIGIR conference on Research and development in information retrieval, New Orleans,Louisian,USA, pp. 276- 284.

[4] Weiyi Meng, Zonghuan Wu, Clement Yu, Zhuogang Li (2001) A highly-scalable and effective method for metasearch, ACM Transactions on Information Systems (TOIS), Vol.19 No. 3, pp. 310-335.

[5] Bernard J. Jansen, Amanda Spink, Sherry Koshman (2007) Web searcher interaction with the Dogpile.com metasearch engine, Journal of the American Society for Information Science and Technology, Vol. 58, No. 5, pp. 744-755.

[6] Glover, J. Lawrence, S. Birmingham, P. Giles, C.(1999) Architecture of a Metasearch engine that Supports User Information Needs. In Proc. of the Eighth International Conference on Information Knowledge Management, (CIKM-99), pp. 210-216

[7] E. Hong Han and G. Karypis D. Mewhort and K. Hatchard (2003) Intelligent Metasearch engine for Knowledge Management, In Proc. of the 12th international conference on Information and knowledge management, New Orleans, LA, USA

[8] Z.Shanfeng, D. Xiaotie, C. Kang, Z. Weimin (2002) Using online relevance feedback to build effective personalized Metasearch engine, In proc of 2ndinternational conference on Web information systems Engineering (WISE'01), Kyoto, Japan: Vol.1, pp. 262 – 268

[9] J. P. Callan, Z. H. Lu, W. B. Croft, "Searching distributed collectionswith inference networks", Proc. the 19th annual international ACMSIGIR Conference on Research and Development in InformationRetrial, 1995, pp. 21-28

[10] D. Dreilinger, A. E. Howe, "Experiences with selecting searchengines using metasearch," ACM Transactions on InformationSystems, vol. 15, no. 3, pp. 195-222, July, 1997

[11] Studies and Evaluation on Meta Search Engines Lin GuoyuanTang JiutaoWang Chun,2011

[12] S. H. Du, B. Yu, Q. D. Zheng, "Designing the Scheduling Strategy ofIntelligent Meta Search engines", Microcomputer Information, vol.26, no. 12, pp. 186-188, 2010

[13] L. Liu, Y. T. Sun, "Design and Realization of Intelligent Meta-searchEngine," Computer Engineering, vol. 29, no. 6, pp. 118-120, 133, April 2003

[14] E. Selberg, O. Etzioni, "Multi-service search and comparison usingthe MetaCrawler," Proc. 4th World Wide Web Conference, Boston,USA, Dec. 1995

[15] M. Zhong, F. A. Liu, "Research on strategy of member selection andresults integration of meta search engine," Computer Engineering andDesign, vol. 28, no. 21, pp. 5125-5127, Nov. 2007