



Incorporation of Databases for Faster Meta Search Engine

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Abstract: A meta search engine is a kind of tool that combines results of multiple individual search engines by sending queries to them. In existing meta search engine, there is no concept of database of meta search engine. Common search engines have their own database. For faster communication and efficiency purpose, database concept should be used with meta search engine. This paper discusses the model of database for meta search engine.

Keywords: meta search engine; database; updating; efficiency; communication

I. INTRODUCTION

A meta search engine is a tool that combines the power of multiple search engines. The idea behind meta search tool is simple. Each search engine on the web has different strengths and weaknesses in terms of usage of different methods to collect information about web pages, usage of different storage resources, etc. [1] People might have seen how these differences cause various search engines to return vastly different results for the same expression. To perform complete search for a particular query, people might need to use several individual search engines. Using a meta search engine people can search several engines at the same time, so user need not conduct the same search many times. [1]

Meta search engines do not have their own databases of web information; instead, a meta search engine transmits user search expression to several search engines, search engines run the search expression against their databases of web information and return results to the meta search engine. The meta search engine then reports consolidated results from all the search engines it queried. [1]

II. PROBLEM DISCUSSION

Meta search engines do not build their own databases like general search engines. [2] The results are collected from various individual search engines by meta search engine. They are sorted and displayed on screen in a logical way. So, this way it decreases efficiency of results retrieval.

III. CURRENT WORK

Hundreds of search engines exist. Second-generation search engines feature intelligent agents designed to help refine user question by providing suggestions and alternate lines of inquiry. Other second-generation search engines provide continual updating services using "Push Technology" that store user search profile, run searches, and report results automatically. [3] Keeping up with developments in search engines is a challenge. [3] Here, new concept of introducing databases with common search engine identified like databases with common search engines. Common search engines crawls the web by looking

inside web pages or on the bases of web page titles and stores information in the databases. Based on related user search text it retrieves web information from their databases.

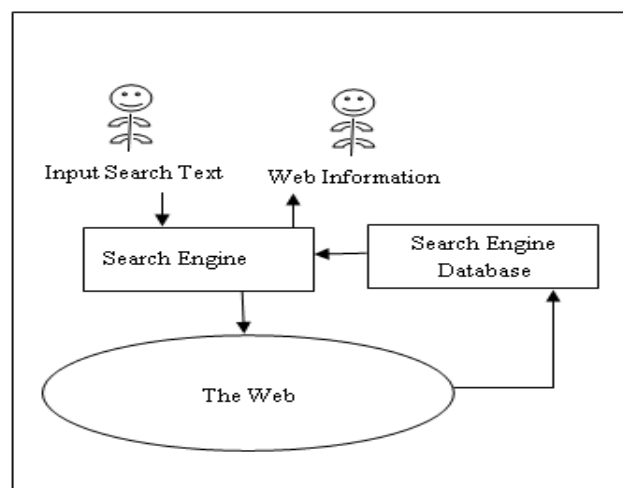


Figure1. Common search engine model

Existing meta search engines do not have their own databases as discussed earlier and works like as below by sending queries to multiple individual search engine.

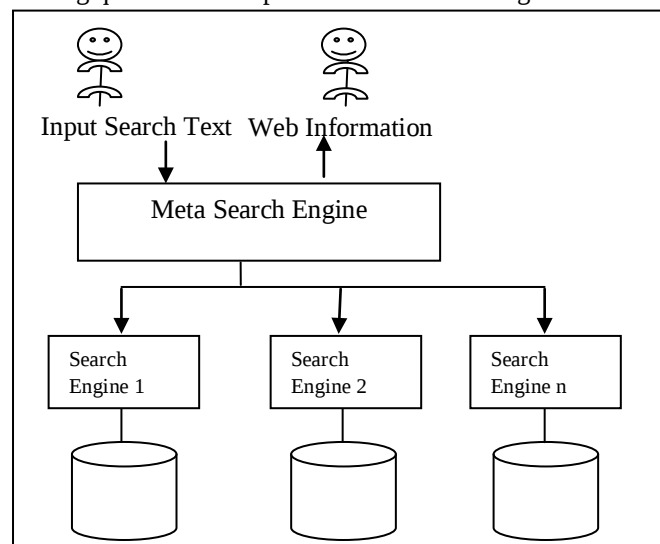


Figure2. Meta search engine model

The model of meta search engine with its own database is as below.

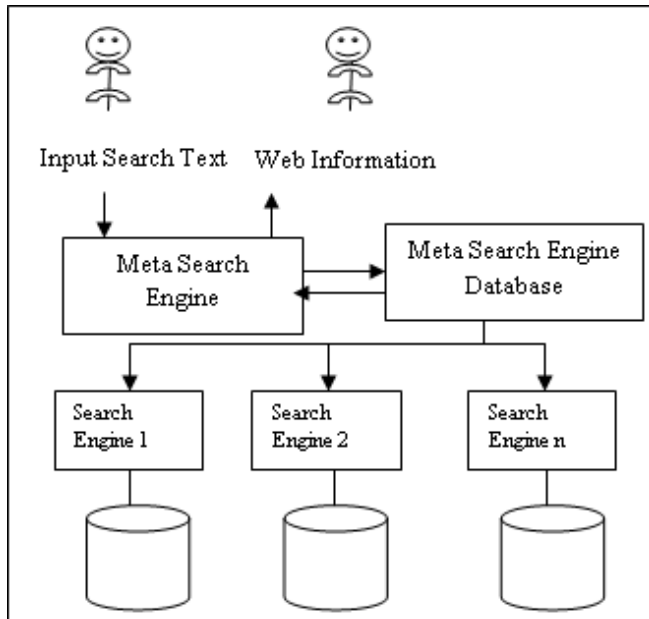


Figure3. Meta search engine with database model

In meta search engine with database based on search text first will look in the database whether search text containing keywords are available in it or not. User search keywords are already searched or not. If “yes” then will retrieve web information from the database by sending simple query.

Otherwise, search query will be send to multiple individual search engines and retrieved result will be stored in the database and then through procedure web information from database will be displayed on user screen.

Communication between engine and database will be faster than communication between engine and the web. In addition to this work there is a requirement of periodical updating services which will run queries and report results automatically to the database like updating database of common search engines.

Goal of using meta search engine is to get consolidated web results by sending queries to multiple individual search engine. It is used to have limited number of hits on screen. Dealing with multiple individual search engines for this may retrieve large number of search results with duplicates. Instead let have database containing unique web results for specific search text will help user to get web information in an efficient way.

IV. CONCLUSION

In this paper, incorporation of databases for faster meta search engine is discussed. Existing concept deal with database of multiple individual search engines. But newly introduced concept deal with own database of meta search engine itself will increase efficiency and will not have chance of timeout problem. Necessary thing here is database updation over a period of time to increase reliability like common search engines.

V. REFERENCES

- [1] Gary P. Schneider, Jessica Evans, “The Internet”, 7th Edition, Copyright: 2009, 2007 Course Technology, Cengage Learning. (e-book)
- [2] Theo Bothma, Erica Cosijn, Ina Fourie, Cecilia Penzhorn, “Navigating Information Literacy” (Your Information Society Survival Toolkit) Copyright: Maskew Miller Longman (Pty) Ltd 2008. (e-book)
- [3] William Sanborn Pfeiffer, T. V. S. Padmaja, “Technical Communication” (A Practical Approach) 6th Edition Copyright: 2007 Dorling Kindersley (India) Pvt. Ltd. (e-book)
- [4] Hossein Bidgoll (Editor-in-Chief), “The Internet Encyclopedia”, Volume 3, Copyright: 2004 by John Wiley & Sons, Inc. (e-book)