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Research Paper

DYNAMIC MANAGEMENT OF STOP WORDS IN META SEARCH ENGINE

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ABSTRACT

Existing meta search engines use method for displaying search result on screen with or without stop words. They basically send request for links on individual search engine and retrieve ambiguous results and display aggregate result on screen based on own rank assigned. In existing meta search engines there is no availability of database for stop words management. There is a need to have role of database for dynamic management of stop words. This paper discusses the need of database for storage of stop words in a meta search engine and discusses a model, which allows administrator to manage stop words dynamically.

KEYWORDS - meta search engine; stop words; elimination; dynamic management; specific results

I. INTRODUCTION

A meta search engine is a tool that combines the search results of multiple search engines. Each search engine on the Web has different benefits and drawbacks in terms of usage of different ranking methods to display links on screen, usage of different resources, etc. Users might have seen how these differences cause different search engines to return hugely different search results for the same input search text including stop words. To perform absolute search for a query, users might need to use various individual search engines. Using a meta search engine users can search different engines at the same time, so user does not need to conduct the same search a number of times on different individual search engine. A meta search engine sends user input search text to several other search engines, search engines run the search text against their databases of the Web information and return results to the meta search engine with or without stop words. The meta search engine then returns consolidated results from all individual search engines.

The problem with existing scenario is, meta search engines do not eliminate stop words for search process and returns ambiguous results. And because of that it causes problem of unspecific results. The results are combined from various individual search engines by meta search engine with or without stop words, displayed on screen in a logical way using ranking formula.

Stop words are common words (a, an, but, or, nor, for, the) that the search engines ignore during a search. Search engines filter out these words because the use of these words in a search query can slow down search results without improving their accuracy. Filtering out common words can save search engines enormous amounts of space in their indices. [4] Since all words in the sentence are not likely to be useful for disambiguating the target word and some words may even have negative effect on the performance. Eliminating or reducing word should help to achieve better search results. The question that remains is the basis of including or excluding words in the context. [2] Syntax captures internal structure of sentences and eliminates stop words exists with user input (i.e. search text). Syntax should be useful for deciding which words in the sentence are related to the target noise (i.e. actual output). [2]. There is need of a database concept for storing stop words; its need is for dynamic management of stop words in meta search engine. The model is proposed in this paper.

II. THE MODEL

The new model of a meta search engine is proposed here with database concept for storing various stop words. Administrator can manage stop words in proposed model dynamically. In administrator panel the basic operations like Insert, Update, Delete and View are provided to manage stop words dynamically.

A new model of the meta search engine includes concept of stop words elimination for specific search results retrieval, because users always enter their queries in natural language including stop words. They are not aware about importance of specific search results. It is desired that users expect specific search results.

In the new model of a meta search engine, to search specific text by eliminating stop words, first it will look in the database whether search text containing stop words are available in it or not. If stop words are already in database, then will eliminate all stop words with user input search text and will prepare new search text with no stop words. And that will be input to different individual search engine URL.

Following fig.1 to fig. 5 represents insert, update, delete and view operations on database of stop words in a developed meta search engine.

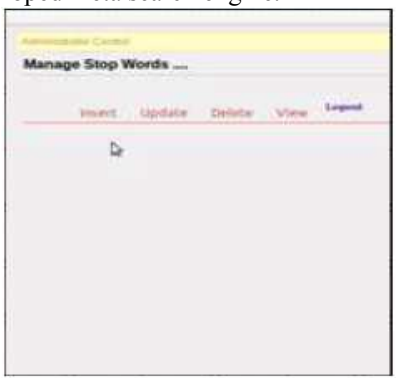

Fig.1 First screen for manage stop words module on administrator side of a new model

Fig. 1 shows screen of manage stop words module, which enables administrator to perform various operations like, Insert, Update, Delete and View.

Fig. 2 shows screen of insert operation, which enables administrator to insert stop word in database. Database containing stop words like, ‘is’, ‘a’, ‘an’, ‘that’, etc used by meta search engine to find matches if they exists with user input search text.

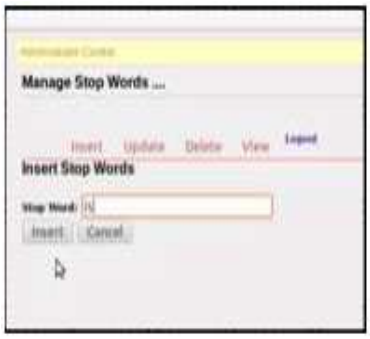

Fig. 2 Screen for insert operation

If match found, meta search engine will eliminate those stop words which may lead to return ambiguous results.

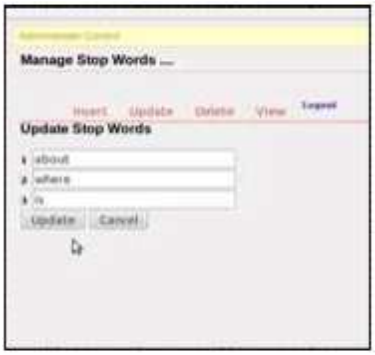

Fig. 3 Update operation shows field values retrieved from database

Fig. 3 shows screen of update operation with stop word records available in database. This enables administrator to view existing records available in database and perform update operation.

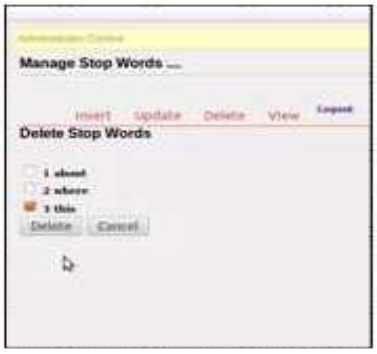

Fig. 4 Delete operation for manage stop words in a new model

Fig. 4 shows screen for delete operation, enables administrator to delete selected number of records at a time. This screen displays all records with check boxes dynamically, enables administrator to select records for deletion.

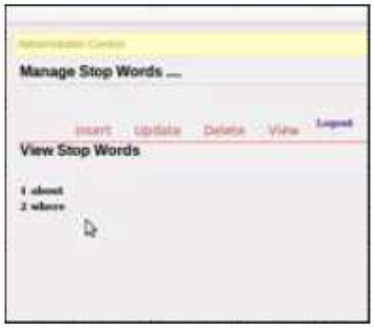

Fig. 5 View screen with records in database

Fig. 5 shows view screen and shows all records related to stop words exists in a database.

III.CONCLUSION

In existing scenario, in meta search engines there is no concept of database for dynamic stop words management. In a new model of meta search engine database concept for management of stop word has been introduced, which allows administrator to manage stop words dynamically.

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