Dynamic Management of Search Engine’s URLs in Meta Search Engine

Mr. Biraj Patel*, Dr. Dipti Shah
G H Patel Post Graduate Department of Computer Science and Technology, Sardar Patel University, Vallabhbhi Vidyanagar, India

Abstract - Existing meta search engines use common approach in terms of displaying search result on screen retrieved from various fixed number of individual search engine. Meta search engines send request for links on individual search engine and retrieve results and display aggregate result on screen based on own rank. In existing scenario, meta search engines use arrays for selection of search engine for search process. Since, existing meta search engine works for a fixed number of search engines. There is a need to have role of database for storing of various search engines URLs. This paper discusses the model of meta search engine, which uses database concept for management of various search engines URLs. This concept allows administrator to manage search engines URLs dynamically using Administrator Panel.

Keywords - meta search engine; search engine URL (Uniform Resource Locator); dynamic management; administrator panel; basic operations.

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 pros and cons in terms of usage of different ranking methods to display information about web pages, usage of different resources, etc. Users might have seen how these differences cause distinct search engines to return hugely different search results for the same input search text. 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 several times on different search engine. Meta search engines do not have their own databases for storage of search engine URLs; instead, a meta search engine sends user input search text to several other search engines which are listed in an array. Search engines run the search text against their databases of the Web information and return results to the meta search engine. The meta search engine returns consolidated results from all the search engines which are listed in array. The problem with existing scenario is, meta search engines do not have their own databases for storage of search engine URLs and their components purpose. Because of that it causes problem of working with fixed number of search engines. The results are combined from various individual fixed number of search engines by meta search engine sorted and displayed on screen in a logical way using rank assigned based on fired user input query. There is need of a database concept for storing URL of search engines in meta search engine. The model is proposed here.

II. The Model

The new model of a meta search engine is proposed here with a database concept for storing search engine’s URLs. Administrator can manage URL of search engines and its components dynamically. In administrator panel basic operations like insert, update, delete and view are provided. To fire user search query a new model of meta search engine looks in the database for use of search engine URLs for results retrieval. Following screen shows demonstration of all these operation.

![Fig. 1 First screen of Manage Search Engines module in a new model](image-url)
Following Fig. 1 shows first screen for the module manage search engine, which is part of administrator panel in a new model of meta search engine, which enables administrator to perform various operations to manage search engine URLs and its components like Insert, Update Root URL, Update Sub URL, Delete Root URL, Delete Sub URL, View.

Fig.2 Insert operation for manage search engines module with sample inputs on administrator side of a new model. Fig. 2 shows a screen with sample inputs for the purpose of insertion of search engines root URL like, http://www.google.co.in/ and its components which takes sub string that is user input for the Web information retrieval for user input search text.

Fig.3 Update operation screen showing for root URL in a new model, part of manage search engines. Fig. 3 shows screen for update operation with existing record in database. So, administrator can view it and take appropriate decision for updation of record. This is for root URL updation only.
Fig. 4 shows screen for update operation with existing record in database. So, administrator can view it and take appropriate decision for updation of record. This is for sub URLs updation only.

Fig. 5 shows a screen for delete operation, which enables administrator to delete root URL if there is no sub URLs of it.
Fig. 6 Delete operation screen showing for sub URL in a new model, part of manage search engines. Fig. 6 shows selection screen for deleting sub URL. It enables administrator to select root URL first and then to delete sub URL.

Fig. 7 Delete operation screen showing for sub URL in a new model, part of manage search engines. Fig. 7 shows delete screen to delete sub URLs under selected root URL.
III. Conclusion

In existing scenario, in meta search engines there is no concept of database for listing of search engine URLs. In a new model of meta search engine the concept of dynamic management of search engine’s URLs and its components to search the Web information from various search engines is introduced using database concept. This enables user to get search text from search engines listed in database and eliminates problem related to use of fixed number of search engines. Hence, this new model of meta search engine retrieves results based on dynamic management of search engines.

References


