A

Seminar report

on

Meta Search Engine

Submitted in partial fulfillment of the requirement for the award of degree
of Bachelor of Technology in Computer Science

SUBMITTED TO: **SUBMITTED BY:**

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Preface

I have made this report file on the topic **Meta Search Engine ,** I have tried my best to elucidate all the relevant detail to the topic to be included in the report. While in the beginning I have tried to give a general view about this topic.

My efforts and wholehearted co-corporation of each and everyone has ended on a successful note. I express my sincere gratitude to …………..who assisting me throughout the preparation of this topic. I thank him for providing me the reinforcement, confidence and most importantly the track for the topic whenever I needed it.

Introduction

To engineer a search engine is a challenging task. Search engines index tens to hundreds of millions of web pages involving a comparable number of distinct terms. They answer tens of millions of queries every day.

Despite the importance of large-scale search engines on the web, very little academic research has been done on them. Furthermore, due to rapid advance in technology and web proliferation, creating a web search engine today is very different from three years ago.

What is a Meta Search Engine?

To understand what a meta search engine is, first you have to understand how a search engine works. The search engine visits billions of websites and creates a database or repository of sorts of the various sites.

This is known as the index. Then whenever a user enters the search query, something magical happens (algorithms if you are a computer geek) and the pages that are deemed relevant to what you asked for are returned.

Pretty simple, huh? If only you could improve those magical algorithms you could create the next Google (although Google is smart enough to hire you instead!).

Definition

Meta search engines are search engine tools that pass queries on to many other search engines and/or directories and then summarize all the results in one handy interface.

Many people use meta search engines to get even more comprehensive results for their search query; for example, a simple search for "puppy" brings back images, videos, and multiple content suggestions.

Why Meta Search?

- Individual Search engines don't cover all the web by themselves,
- Individual Search Engines are prone to spamming {people trying to raise their ranking profile. In a non-legitimate manner or to promote commerce}
- Difficulty in deciding and obtaining results with combined searches on different search engines,
- Data Fusion {multiple formats supported},
- In Case of niche search engines provides the 'big picture',
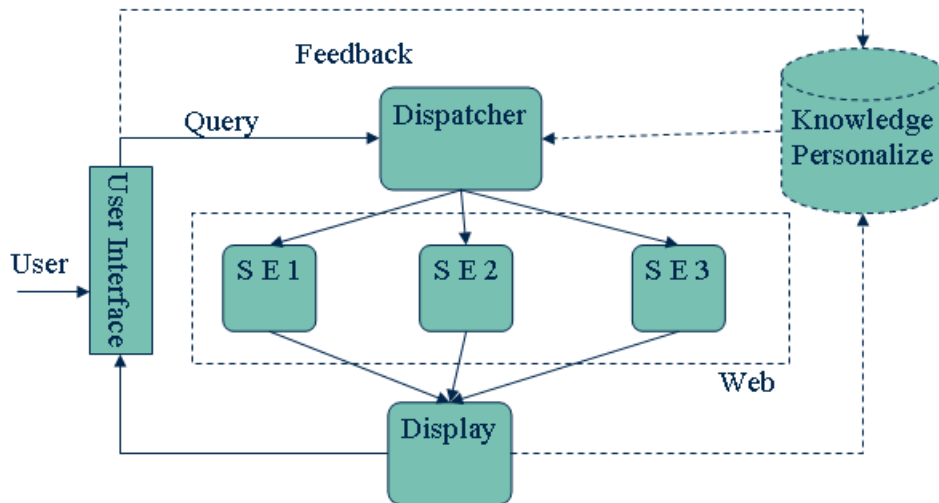- Takes less effort.

History

The concept of Meta-Search Engine came into existence in which a single interface provided search result that was generated by multiple search engines rather than a single Search Engine Algorithm.

Daniel Dreilinger at Colorado State University developed Search Savvy which let users searched up to 20 different search engines at one and a number of directories.

Meta Crawler improved on accuracy of Search Savvy with the addition of its own search syntax and behind the scenes, matching its syntax to that of the search engines it was probing.

Meta Crawler searched through six search engines, yet while providing better results, still could not match those achieved by searching each engine individually.

Architecture

- ⊞ User Interface
  - ■ Normally resemble search engine interfaces with options for
    - ■ Types of search [Media]
    - ■ Search Engines to Use
- ⊞ Dispatcher
  - ■ Generates actual queries to the search engines by using the user query
  - ■ May involve choosing/expanding search engines to use

- ⊞ Display
  - ■ Generates Results page from the replies received, May involve ranking, parsing, clustering of the search results or just plain stitching.
- ⊞ Personalization/Knowledge
  - ■ May contain either or both Personalization may involve weighting of search results/query/engine for each user.

Advantages

1. Searches all the major search engines at once so searching them all individually is not necessary
2. Has an easy to use toolbar available for download
3. Also allows you to search the white pages and yellow pages
4. Free and easy to use, similar format to other search engines
5. Customizable for user's preferences

Disadvantages

1. You will get a lot more results because it searches multiple engines so you have to be specific
2. Mainly provides only the main hits for the other search engines, so results that are more obscure on the other search engines may not show up, so you may not find what you want
3. Not as practical as say google or yahoo
4. Not very well known
5. Not really any more reliable than the other search engines

Conclusion and Future Work

In this paper we made a brief survey on Meta search engine and the key technologies of Meta search engines through which the performance of a Meta search engine can be determined.

We summarized various Meta search engines that are developed so far. We hope, this paper gives a broad overview of Meta search engine. We concluded that Meta search engine solves the problem for user as they send queries to different search engines and aggregates the results into a single list.

As a future work, improvement over the existing search engines with better results can be achieved by removing the limitations particularly in terms of time, accuracy of result and relevancy of result.

An efficient semantic web search engines should meet out these challenges efficiently and allow end users to ask complex queries and provide comprehensive means to handle them and provide quick response to user queries.