

Query Recommendations System with Filtration and Relaxation Method.



Management

KEYWORDS : Data mining, collaborative data mining, data exploration

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ABSTRACT

Collaborative data mining is a very important task in information mining. Where user who are unknown about SQL concepts to fire a query to search a particular result face a great difficulty in data mining task. To help those users our query recommendation system is developed. This system continuously monitor the user behaviour and find the matching pattern or data from recorded SQL query log, to find out the older member with similar information need. And then this query system is able to get a recommendation based on the o obtained data by assuming that current user may find needed data. In this work we are record the active user session as well as all previous user session. From the current user session we collect fragments of query, by the help of this fragment we find out similar result from query log. At basic level SQL suggestions are selected by profiling the users past behavior and comparing them with other users. First-time users, however, may not have the necessary knowledge to know where to start their exploration. Other times, users may simply overlook queries that retrieve important information. The queries are fragmented and ranked according to relevance and the relevant queries are retrieved using 'User's querying Behaviour'. This time we try find out the effect of query relaxation method on previously defined fragment based recommendations and also explore the sequence based approach.

1. Introduction

Query recommendation system will continuously monitors the user's querying behaviour and find matching patterns in the system's query log, in an attempt to identify previous users with similar information needs. Subsequently, system uses these "similar" users and their queries to recommend queries that the current user may find interesting.[10] Despite the availability of querying tools over large databases, users often have difficulties in understanding the underlying schema and formulating queries. Recommender systems or recommendation systems are a subclass of information filtering system that seek to predict the 'rating' or 'preference' that user would give to an item.

Recommender systems have become extremely common in recent years, and are applied in a variety of applications. The most popular ones are probably movies, music, news, books, research articles, search queries, social tags, and products in general. Recommender systems typically produce a list of recommendations in one of two ways – through collaborative or content – based filtering. Collaborative filtering approaches build a model from a user's past behaviour as well as similar decisions made by others, and then use that model to predict items that the user may have an interest in. Content – based filtering approaches utilize a series of discrete characteristics of an item in order to recommend additional items with similar properties. Recommender system is an active research area in the data mining and machine learning areas.

When a new user interact with database system he has to face some problem like what type of database is present and if they have idea of database then how to retrieve needed information from that database. Even skill people are also facing the same problem to execute some complicated query. To overcome this problem I use query relaxation method which relax some important part of query like attribute at the retrieval stage. And give a better result to user. And compare the impact of both query relaxation and sequenced based approach on recommendation system.

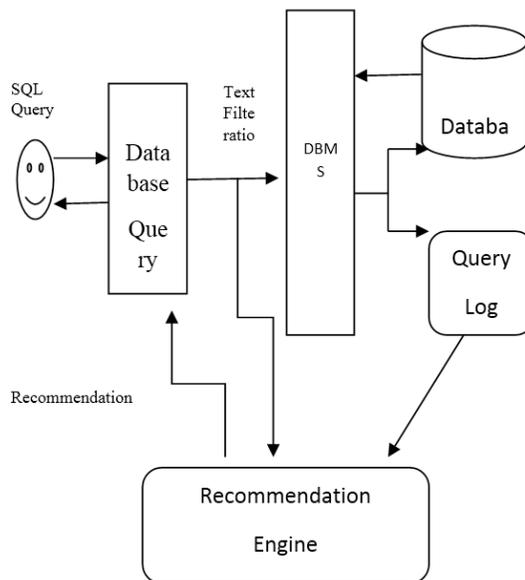
1.2 Problem Specification

For query recommendation, I am finding out the easiest and fast method to retrieve suggestions from the system. In previously define methodology every algorithms or methods are scan all possible documents for the recommendation which takes lots of time. I am trying to minimize that timing for recommendation.

1.3 Proposed Methodology

In this paper, we address the issue for scanning whole data. When any user entered a query or any word for searching our system is match those entered content with all possible option. But in this case we apply filtrations on that entered keyword by user and decide which type of data will scan for given query. Depend on the entered keyword we check for either it is keyword, value or object. And depend on that result we scan the document.

2. Architecture



2.1 Steps in Model Execution

1. Text Filtration
2. Recommendation Result
3. Ranking
4. Final result

1. Text Filtration :

Text filtration accepts the data which is entered by user, and fragments every word from that text. Then it checks each fragment for either it is keyword, values or object.

2. Recommendation result :

Base on above filtered result our dataset is scan to find out needed information to the user.

3. Ranking :

2nd step gives all possible result present in the system, but depend on the ranking which data is user almost in the system are allocated on the first position on recommendation engine.

4. Final result

In the last step, higher rank data is given to the user as a query result. And when user is accepted that data and access it, then again we mark that data for next ranking result.

3. Application

Recommendation System can be used for any used in any Search engine.

4. Conclusion

From this enhanced method we are try to minimize the time which is required for search engine.

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