

# Incremental Query Processing Based on Top K Results

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**Abstract:** Information retrieving is the main concept in present days. Because every information is necessary for developing applications. Web extracting is the one type of information providing tool. Traditional web extraction techniques present IQP - a novel approach to bridge the gap between usability of keyword search and expressiveness of database queries. IQP enables a user to start with an arbitrary keyword query and incrementally refine it into a structured query through an interactive interface. IQP (Increment Query Planning), and demonstrates its effectiveness and scalability through experiments over real-world data and a user study. But biased ranking is the problem for arranging query results in data extraction process. So, in this paper we propose top k ranking algorithm for arranging query results in hits based priority. Our experimental result shows the efficient ranking results of the users.

**Index Terms:** Incremental query processing, sub query relationship, Optimal Query processing, top k results.

## I. INTRODUCTION

Query processing and optimization is a fundamental, if not critical, part of any DBMS. To be utilized effectively, the results of queries must be available in the timeframe needed by the submitting user be it a person, robotic assembly machine or even another distinct and separate DBMS. To find exact information from a database, users prefer mostly structured queries. If user don't have exact knowledge about database structure and have not sufficient knowledge about query construction language, then user may fail to get appropriate structured query of their intended information. It may give many unwanted answers. Users frequently using keyword search process to retrieve their required information.



**Figure 1: Information extraction from web applications.**

User have to register first .after registration user can login to access IQP window through which he can submit the keyword query for fetching required structured query. The process of retrieving intended output from users input keyword is presented in the flow chart bellow.

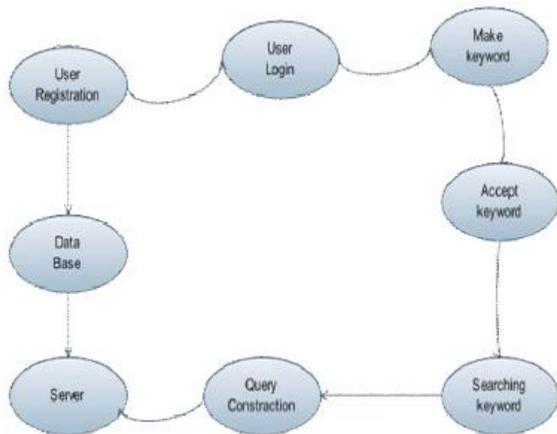


Figure 2: Flow process in IQP.

When user issues a keyword query in the input field, it presents a number of query construction options in the query construction option window. User has to select an option corresponding to his requirement. Based on that possible structured query is formed. User then selects the appropriate information from those options. With this the query construction field displays the constructed structured query for the selected option. Consider the above process keyword based results are accessed efficiently. To address the problem in efficient results based on top K entries of a user search results. Those results can be achieved in hub rank priority authorizations in information extraction from various user processes.

## II. RELATED WORK

The most relational data bases provide users with full text search capability restricted to one table attributes in single structure web architecture. Nowadays in the age of web search machines ordinary users let himself be spoilt with the ease of use of a keyword query. Unfortunately, this simplicity doesn't mean

high expressiveness and quality of the retrieved results. The less knowledge about the intent behind a query is provided, the more effort is needed to extract the satisfying information from database. On the contrary, databases are equipped with a powerful query language that allows asking even trickiest and unusual questions but is too complex and hard to understand for an ordinary user. Finally in this we are introducing top search results of the web data accessing in real time data accessing.

## III. EXISTING RESULTS

Given by keyword query, for each keyword the IQP system generates a number of keyword interpretations based on the occurrences of the keyword in different attributes. The attributes are associated with database tables. Only the tables chosen on hand of the generated keyword interpretations can become concepts. Further each chosen table is mapped to a semantic category from ontology. While a database table can have only one corresponding match in ontology, one category can be assigned to several tables. The experiment results for IMDB and Lyrics are shown in figure below. In both figures each data point on the X-axis represents a keyword query. Each Y-axis represents an interaction cost (Number of options evaluated).

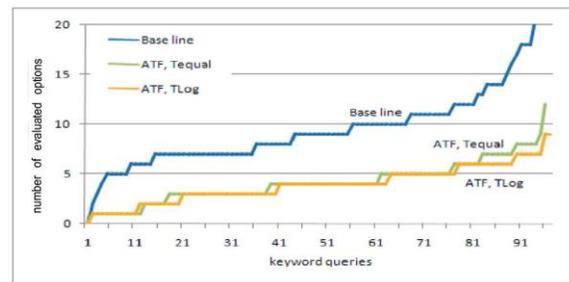


Figure 3: Efficient based on IQP system process.

We are accessing query results, a keyword query is represented as  $K$  and let the structured query  $Q$  be complete interpretation of  $K$ .

#### IV. PROPOSED RESULTS

Supporting efficient top-k processing in database systems is a relatively recent and active line of research. Top-k processing has been addressed from different perspectives in the current literature. We discussing our classifications dimensions, and their impact on the design of the underlying top-k processing techniques.

##### Query Model for Top Results

The scores are assumed to be attached to base tuples. A top-k selection query is required to report the  $k$  tuples with the highest scores. Scores might not be readily available since they could be the outcome of some user-defined scoring function that aggregates information coming from different tuple attributes.

A SQL template for top-k selection query is the following:

```
SELECT some attributes
FROM R
WHERE selection condition
ORDER BY F(p1, ..., p m)
LIMIT k.
```

Those results can be accessed by the above results.

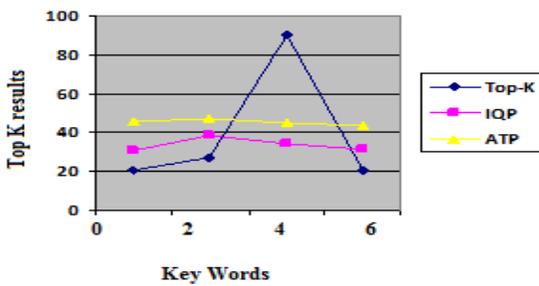
- 1) Access the  $n$  lists in parallel.
- 2) While some object  $o_i$  is seen, perform a **random access** to the other lists to find the complete score for  $o_i$ .
- 3) Do the same for all objects in the current row.
- 4) Now compute the threshold  $\tau$  as the **sum of scores** in the current row.
- 5)The algorithm stops after  $K$  objects have been found with a score above  $\tau$ .

##### Algorithm 1: Top Entry algorithm for arranging results.

Another important issue is the minimization of the required memory, i.e., the maximum number of candidate top-k objects. NRA allocates memory for every newly seen object, until the termination condition  $t \geq u$  is met. However, during top-k processing, we should avoid maintaining information about objects that we know that may never be included in the result.

#### V. EXPERIMENTAL RESULTS

The aim of our experiments is to examine how good YAGO-based query construction options can assist users to construct a structured query starting with single keywords. For example we are assigning a keyword like DOTNET, then our proposed work can efficiently find out the top  $K$  results belongs to DOTNET keyword. Those results are accessed efficiently in our proposed systems.



**Figure 4: Experimental results in top-K algorithms.**

However, during top-k processing, we should avoid maintaining information about objects that we know that may never be included in the result. Finally, we should avoid redundant accesses to any input  $S_i$  that does not contribute to the scores of objects that may end up in the top-k result.

## VI. CONCLUSION

IQP (Increment Query Planning), and demonstrates its effectiveness and scalability through experiments over real-world data and a user study. But biased ranking is the problem for arranging query results in data extraction process. The attributes are associated with database tables. Only the tables chosen on hand of the generated keyword interpretations can become concepts. Further each chosen table is mapped to a semantic category from ontology. So, in this paper we propose top k ranking algorithm for arranging query results in hits based priority. Our experimental result shows the efficient ranking results of the users.

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