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A Survey on Efficient Location Tracker Using Keyword Search

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ABSTRACT: Spatial databases are stores the information about the spatial objects which are associated with the keywords to indicate information such as business/ features /services. Very important problem known as closest keywords search is to query objects, called keyword cover. In closest keyword search, it covers a set of query keywords and minimum distance between objects. From last few years, keyword rating increases its availability and importance in object evaluation for the decision making. This is the main reason for developing this new algorithm called Best keyword cover which is considers inter-distance as well as the rating provided by the customers through the online business review sites. Closest keyword search algorithm combines the objects from different query keywords to generate candidate keyword covers. Baseline algorithm and keyword nearest neighbor expansion algorithms are used to find the best keyword cover. The performance of the closest keyword algorithm drops dramatically, when the number of query keyword increases. To solve this problem of the existing algorithm, this work proposes generic version called keyword nearest neighbor expansion which reduces the resulted candidate keyword covers and adding user preference form historical search will give a better user experience.

KEYWORDS: Point of interests, Spatial database, keywords, keyword cover, keyword rating

I. INTRODUCTION

Now days, use of mobile computing increases [5]. Inspired by the mobile computing, the problem of spatial keywords search has attracted much attention recently because of location-based services and wide availability of extensive digital maps and satellite imagery [1]. So the number of users using the location based services has been also increased to large extend. Spatial objects indicates the information such as its business/services/features which are associated to keyword(s)[7][8]. Spatial database represents each tuple a spatial object. The main idea behind the spatial keywords search is to identify spatial object(s) which are associated with keywords relevant to a set of query keywords which are close to each other and/or close to the query location. Problem has unique value in various applications and users requirements are expressed as multiple problem have been studied because of the value of the special keyword search in practice. It investigates a generic version of mCK query, called Best Keyword Cover (BKC) query, it considers inter-objects distance as well as keyword rating. It is motivated by the observation of increasing availability and importance of keyword rating in decision making. Millions of businesses/services around the world have been rated by customers through various online business review websites such as like ZAGAT, etc. For example, a restaurant is rated 65 out of 100 (ZAGAT.com) and a hotel is rated 3.9 out of 5 (hotels.com). According to a survey in 2013 conducted by Dimensional Research an overwhelming 90 percent of respondents claimed that buying decisions are influenced by online business review/rating.[1] As consideration of keyword rating, solution of BKC can be different from of mCK query). It develops two algorithms for BKC query processing, baseline and keyword-NNE. The baseline algorithm is inspired by the mCK query processing methods Both the baseline algorithm and keyword .NNE algorithm are supported by indexing the objects with an R*-tree like index, called KRR*- tree.[1] In the baseline algorithm, the idea is to combine nodes in higher hierarchical levels of KRR* trees to generate candidate keyword covers. Then, the most promising candidate is assessed in priority by combining their child nodes to generate new candidates. Even though BKC query can be effectively resolved, when the number of query keywords increases, the performance drops

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dramatically as a result of massive candidate keyword covers generated. To overcome this critical drawback, we developed much scalable keyword nearest neighbor expansion (keyword-NNE) algorithm which applies a different strategy. Keyword- NNE selects one query keyword as principal query keyword. The objects associated with the principal query keyword are principal objects.

II. RELATED WORK

Locating mapped resources in web 2.0: Mapping mashaps are emerging application in web 2.0 which contains object like photos videos etc. for example Google or yahoo mashups. Which contain set of coordinates indicate their geographical locations. It also provide information about tag matching technique which is used to locate an object Efficient algorithm to search for minimal closed cover in sequential machines: The state reduction in FSM is very complex problem. It provide efficient algorithm for state minimization in FSM. It also reduces search space and finds minimal close cover. Technique eliminates redundant states in a very short execution time.

Keyword search in special database towards searching by document: It used mCK query in a special database each tuple contain some descriptive information which is represented by using keywords mCK query finds specially closest tuples which matches with user specified keywords. It introduces a bR tree based or R tree.

Efficient continuously moving top k special keyword query processing: Now a day's web data contains the geo information of users and content. The processing of continuously moving top k special keyword (MkSK) queries for special keyword data. It contains concept of safe zones which is nothing but validity of result until user remains in same zone but this method only focus on special locations not on textual data.

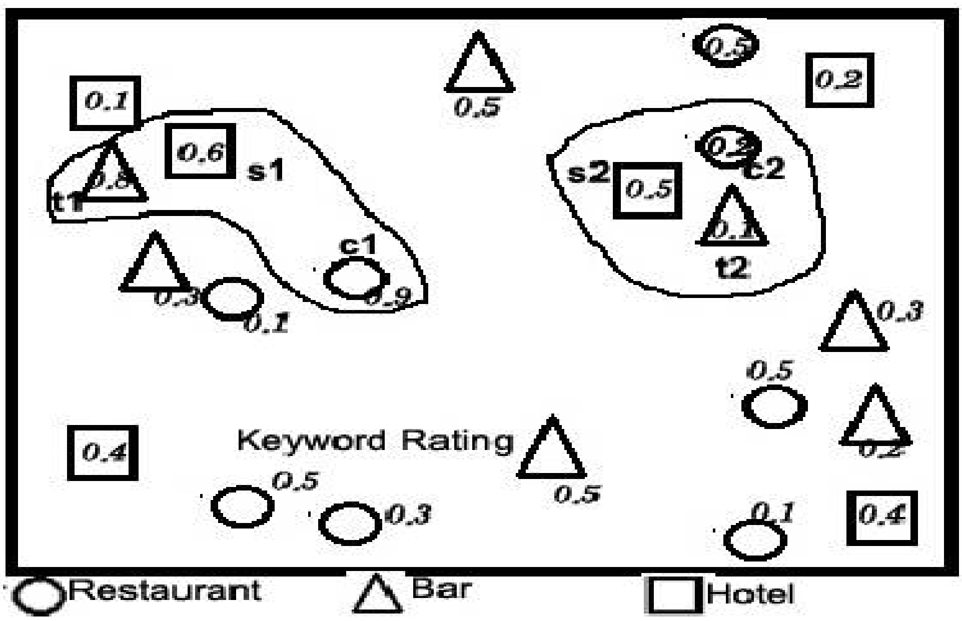

Fig. I. Existing system location choice with BKC vs mCK

III. PROPOSED ALGORITHM

In this it investigates a generic version of mCK query, called Best Keyword Cover (BKC) query, which considers inter-objects distance as well as keyword rating. It is motivated by the observation of increasing availability and keyword rating is used in decision making. Customers are rating Millions of businesses/ services/features around the world. They review through many websites. This work develops two BKC query processing algorithms, baseline and keyword-NNE The baseline algorithm is inspired by the mCK query processing methods. Both the baseline algorithm and keyword-NNE algorithm are supported by indexing the objects with an R*- tree like index, called KRR*-tree.

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Developing much scalable keyword nearest neighbor expansion (keyword-NNE) algorithm which applies a different strategy. Also if adding user experience by users previous history will be a great parameter for better user experience. Keyword-NNE selects one query keyword as principal query keyword. The objects associated with the principal query keyword are principal objects. For each principal object, the local best solution (known as local best keyword cover lbkc) is computed. Among them, the lbkc with the highest evaluation is the solution of BKC query. Given a principal object, its lbkc can be identified by simply retrieving a few nearby and highly rated objects in each non-principal query keyword (two-four objects in average as illustrated in experiments). Compared to the baseline algorithm, the number of candidate keyword covers generated in keyword-NNE algorithm is significantly reduced. The in-depth analysis reveals that the number of candidate keyword covers further processed in keyword-NNE algorithm is optimal, and each keyword candidate cover processing generates much less new candidate keyword covers than that in the baseline algorithm. The proposed keyword-NNE algorithm applies a different processing strategy, i.e., searching local best solution for each object in a certain query keyword. As a consequence, the number of candidate keyword covers generated is significantly reduced also when we add user experience then the result we get will be user specific and always user centric for better performance. The analysis reveals that the number of candidate keyword covers which need to be further processed in keyword-NNE algorithm is optimal and processing each keyword candidate cover typically generates much less new candidate keyword covers in keyword-NNE algorithm than in the baseline algorithm.

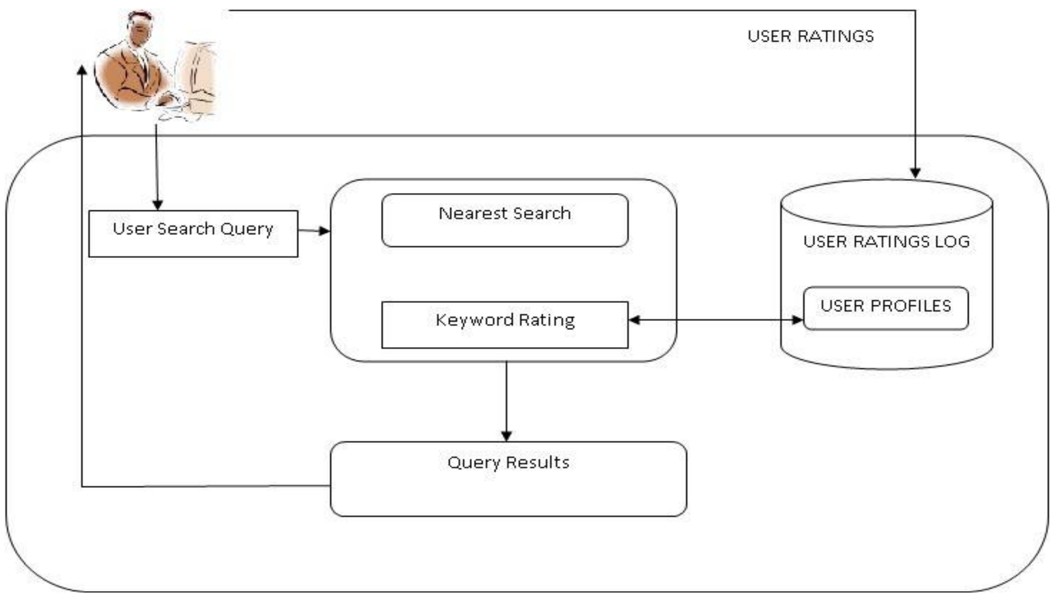

Fig. II. System Architecture

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IV. Pseudo code

```
Input: A set of query keywords T and a spatial database D
Output: Best Keyword Cover
1.Assume that bck.score is 0
2.k - select the query keyword from set T
3.H - child nodes of the root in KRR tree;
4.foreach Nk belongs to H do
5. Compute local best keyword cover of new
keyword nk
6. Add nk to H.head with max lbkc
7.while H is not zero do
8. while H:head is a node in KRR tree do
9. N is child of H.Head
10. for each Nk in N do
11. compute lbck score
12. Add new nk to H
13. Remove old head
14. new ok will be new H.Head
15. compute lbkc score of ok
16. check if bkc score is less than lbkc score of ok then
17. new lbck score will be bkc score for next iteration
18. for each NK in H
19. lbkc score is less or equal bkc score then remove nk form H
20. return bkc
```

V. Conclusion and Future Work

This system provides more sensible decision making than the mCK query. Baseline algorithm which is inspired by the mCK query. The main problem of baseline algorithm is that it reduces the performance when number of query keywords increases. Keyword-NNE algorithm applies a different strategy that searches the best solution in query keyword for each object. It reduces the generated candidate keyword covers. Baseline keyword covers are passed to keyword-NNE algorithm for further processing which is optimal and generates less new candidate keyword covers than the baseline algorithm

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