ISSN:0975-9646

J.Munikishore Reddy et al, / (IJCSIT) International Journal of Computer Science and Information Technologies, Vol. 6 (5) , 2015, 4535-4537

An Admirable Client-Side Result Evaluation Of Location Queries

J.Munikishore Reddy
MTech Student ,
Department Of Computer Science & Engineering
Madanapalle Institute of Technology & Science
Madanapalle, India

M.Kirankumar
Assistant Professor,
Department Of Computer Science & Engineering
Madanapalle Institute of Technology & Science
Madanapalle, India

Abstract— **Now a day's increased smart phones and tablets getting location based services through wireless technologies. one of the main important location based service is Location based skyline queries includes both spatial data and non-spatial data. Due to increased smart phone users this service is limited. To increase location based services forwarding data to cloud maintained by the cloud service provider. Finally the user acquires the LBS behalf of data owners. But compromised cloud service provider is not providing accurate results to all users. We are addressing the Authenticated query processing problem for location based skyline queries with arbitrary subspaces. We present a novel technique Merkle skyline R++ maintenance tree for solving authenticated query processing. Reducing communication among users and server prefetching based method is proposed. Finally proposed algorithms are efficient and effective.**

Keywords-skylinequeries; query authentication; spatial data.

I. INTRODUCTION

With the rapid development of mobile handset devices (such as smart phones and tablet computers), wireless communication, and positioning technologies in the past decade, Location-based services (LBSs) have prospered. Users carrying location-aware mobile devices are able to query LBSs for surrounding points of interest (POIs) anywhere and at any time. Among the many types of location-based queries, one important class is location-based skyline queries. These queries take into account both the spatial and non-spatial attributes of the POIs.

A representative example is finding nearby restaurants with good food, where the distance to the querying user is a spatial attribute and the goodness of the food is a nonspatial attribute. The query returns a set of restaurants that are closer to the querying user and/or have better food than those not returned. In general, while spatial objects can have a long list of non-spatial attributes—such as food quality, service, hygiene, environment, and price—only a small subset of these attributes (termed a subspace) is of interest to a particular user in a single query. Moreover, different users may have different preferences—e.g., Mary prefers taste, whereas Tom is concerned about hygiene, environment, and price. In this project, we call these skyline queries location-based arbitrary-subspace skyline queries LASQs.

II. MATERIALS AND METHODS

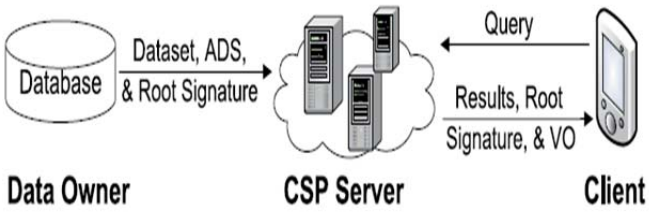

Figure1: Authenticating Location based skyline queries

Here we are using some modules for implementation
Data Owner Module
Client Module
Hotel Module

A. Data Owner Module:

Data Owner / Admin who is responsible for adding cities, or hotels to a city, or adding hotel information. Admin also responsible for adding or deleting the verified users. Data owner can finally add an initial rating for the particular hotel.

B. Client Module:

Users who need to know the hotels around his area based on his requirements like service level, item costs, food quality, etc. Here, User can ask query for getting the sense of best hotels or restaurants in a particular city. He / She can ask the data owner to add a particular city.

C. Hotel Module:

Hotels have their properties like service level, food quality of that hotel, city which where it is situated, price of items of their recipes, customer review ratings, etc.

III. MERKELY SKYLINE R++ MAINTENANCE TREE ALGORITHM

A. Algorithm:

step1: location source with respect point[1]
p1,p2..pn
step2: For every point in the source P do
a. Initialize service S1…Sn for respective points.
b. Set sign and code for every service[2]

step3: Get rank for each service and store into the ascending order.
step4: Store the node in the top level based on the rank
step5: Prune the other items from the location skyline inverted index[3]

B. Equations:

1) Sum for the probabilities for the full-space result objects to be filtered out by their respective Partial-Skyliner++-trees.

$$|F| = \sum_{o \in \mathcal{O}} P(o,q) \times PF(o,q,\Lambda'),$$

2) Increased filtering effect

$$BE(c) = P(o,q) \cdot (GCE(T \cup \{c\}) - GCE(T))$$

3) Finding initial candidate node

$$BE(c_i) = P(o,q) \cdot Area(S_{o,\Lambda} - c_i.S) \cdot 2^3.$$

IV. EXPERIMENTAL RESULT AND ANALYSIS

In this area, we introduce some exploratory assessment of the proposed calculation, which uncover an awesome change in the merkely skyline r++ maintenance tree algorithm . Here we are entering the queries for getting particular location and then giving ratings to particular location.

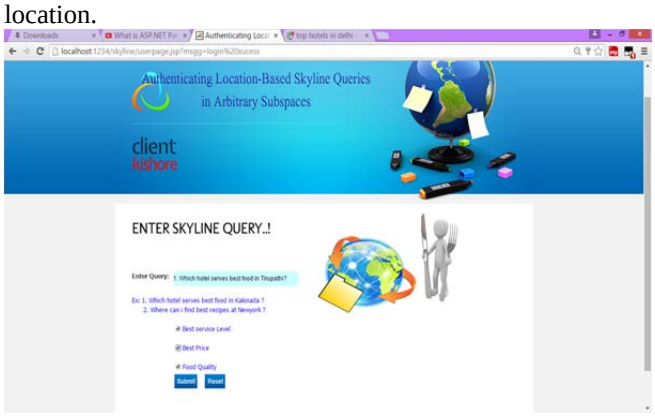

Figure 2: snapshot for giving queries

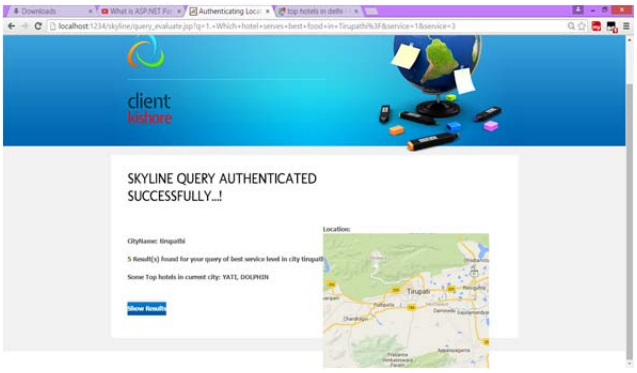

Figure 3: snapshot for results

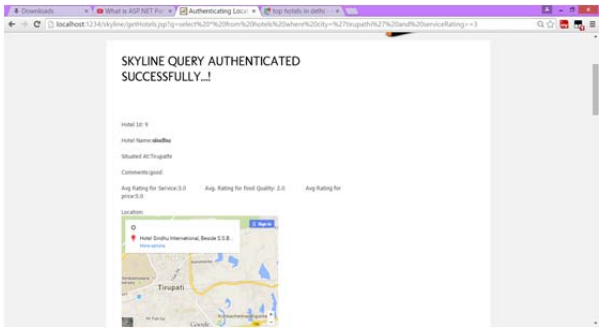

Figure 4: snapshot for query authentication

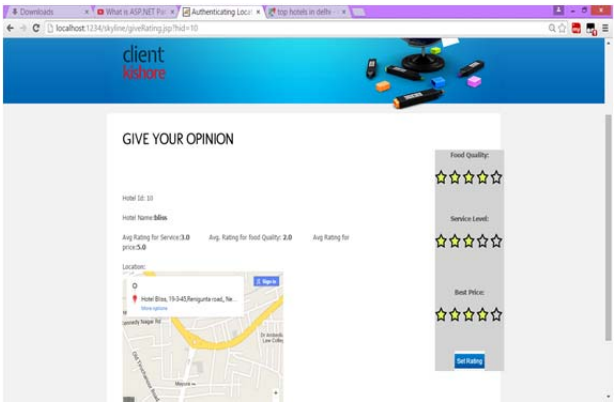

Figure 5: snapshot for give ratings to location

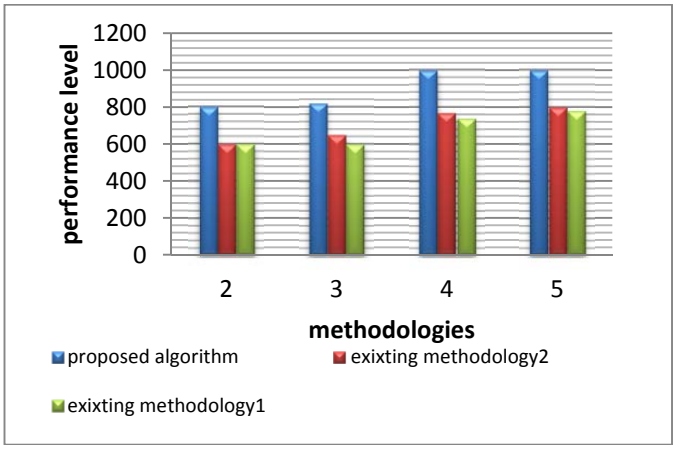

Figure 6: overall query performance for non spatial data

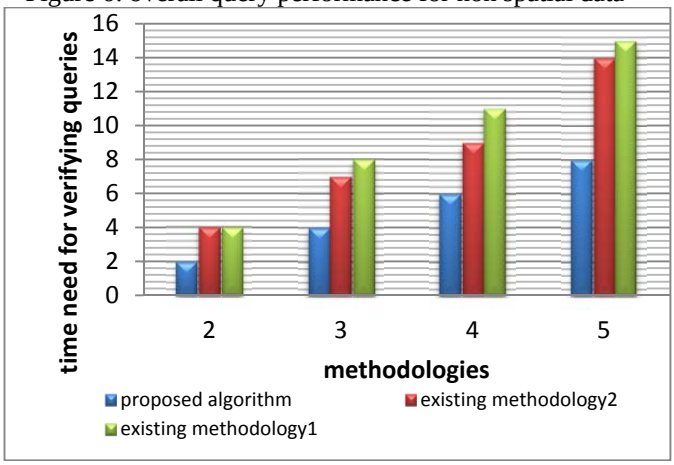

Figure 7: verification time for query

V. CONCLUSION

In this paper, we have studied the problem of authenticating location-based skyline queries in arbitrary subspaces(LASQs). We have proposed a basic merkle skyline r++ tree authentication method by extending our previous work on skyline query authentication. To enable authentication for large scale datasets and subspaces .

VI. FUTUREWORK

As for the future work, we will extend this work to road network environments. Since the query distance is defined by network distance in a road network, the skyline scope defined in this paper no longer works, which calls for new authentication methods. Moreover, we are also interested in studying the authentication problem for dynamic objects, where how to guarantee the freshness of query results is a very challenging issue.

ACKNOWLEDGMENT

This is the project done by me in our college as regular curriculum of MTech degree. This project was funded by MITS College of Engineering.

REFERENCES

[1] W.-T. Balke, U. G untzer, and J. X. Zheng. “E_cient distributed skylining for web information systems”. In EDBT, 2004.

[2] G. Hjaltason and H. Samet. “Distance browsing in spatial database”. ACM TODS, 24(2), 1999.

[3] P. Wu, C. Zhang, Y. Feng, B. Y. Zhao, D. Agrawal, and A. E. Abbadi. “Parallelizing Skyline Queries for Scalable Distribution”. In *EDBT*, pages 112–130, 2006.

[4] F. Li, M. Hadjieleftheriou, G. Kollios, and L. Reyzin. “Authenticated Index Structures for Outsourced Database Systems”. Technical Report BUCS-TR 2006-004, CS Department, Boston University, 2006.

[5] C. Martel, G. Nuckolls, P. Devanbu, M. Gertz, A. Kwong, and S. Stubblebine. “A general model for authenticated datastructures”. Algorithmica, 39(1):21{41, 2004.