Server Initiated Model Using Location Based Service

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*Abstract***:** *In current scenario everyone using the internet for effectuating their work uncomplicatedly. Location Based Service is one of the constituents of this internet world. With the comfort of location based service people chase location uncomplicatedly. But extant Location Based Service systems apply pull model or user initiated model. In the pull model, user chases their location then the user will access response but now I apply push model or server initiated model in which users will access clamant response. In the push, model server conveys to the user according to the extant location of the user. Many researchers applied many algorithms in LBS systems like RT tree algorithm but I will apply Binary search tree algorithm on the location-based service application which is convenient for a quick retort. In research work, I compare that Binary Search Tree gives us to report in less time more than other comparing technique.*

Keywords: LBS System, Binary Search Tree Technique.

1. INTRODUCTION

In the current scenario, everyone has internet connection or smartphones by easing their task. Everyone adopt technologies to accomplish their task smartly. The location based system is one of the technology in the world of internet by which anyone can access facility. By location based system user acquisition anything at any time. For example- if a user visits foreign and doesn't know about that country then location based system also can ease to acquisition highlighted of that country.

Till now the location based system is achieved on the pull model or user initiated model by which user can concern and server reports according to that concern or keyword [2] [3].

But after this facility, I implement push model or server initiated model in which server automatically access user's location and provide information to the user. Actually, push model or server initiated model is adopted for claimant reports.

Many researchers accomplish location based system with RT-tree which is easeful for high performance but I implement push model or server initiated model with a Binary tree.

A binary tree is always searched in increasing order by which it will also give high performance with high speed. In location based system property of binary tree apply on pin code of the particular location and sort location and send reports.

Today android is the essential part of technologies so location based system is developed on android phones by which everyone accommodates facility very easily because everyone has smart phones then the android application is developed and extremely easeful. An example of the location based system is Google map & foursquare which is spread everywhere. Day by day internet or benefit of internet or application of internet is becoming a weakness of every person. So in every single minute, many researchers are researching new technology in the world of internet. Today in the world every single person is habitual to take a benefit of internet so daily new technology is developed. If I talk about location based system then many applications are available and daily a new technology is developed. today's smartphones have very good feature and day by day many smartphones is coming in the market which is also a better feature in compare to previous phones then new technology which is related to the location based system is provided benefit to every single user. Many researchers research on this topic and provide better version like location based system with flex RP set, Min RP set, IR tree, IR^2 tree. Then I decided to implement server initiated model using location-based service with a binary tree. Many Researchers tells their research paper that push model or server initiated model is their future work so after reading many research papers I decided that I implement an android based application server initiated model or push model using location-based service with a binary tree. The binary tree always applied in increasing order or decreasing order so it takes less time to find data in compare to other searching technique. If I talk about location based service then today everywhere this technology can be spread like many shopping apps use this technique for telling the exact location of customer's order, currently a very fame app WhatsApp use this technique to telling the exact location of a particular user by which if I want to share

my location with anyone then I can do it easily. So everywhere this technology is getting a popular fame because of its beneficial. The searching technique is performed on the location based system for getting the best result.

2. LITERATURE REVIEW

There is review of the related to location based system. Many researchers research on this topic and developed a new and better thing in compare to the previous version. Below the list of few researchers who is worked on location based system -

- In topic "Efficient retrieval of the top-k most relevant spatial web objects", [3] author tells us that it is a web application which gives results according to query. According to this technology new framework is developed and search on the basis of a top-k text which is given by the user and according to that time, it is developed for web objects. Because that time mobile phones or wireless technology is not so developed like current scenario.
- In topic "Seal: Spatial-textual similarity search", [4] author tells us that it find an exact location which is queried by the user. According to that technology, ROI is introduced which means a region of interest so this technology is searching location according to the interested region of the user.
- In topic "Collective spatial keyword querying", [5] author tells us that this application finds exact location with exact and approximated result.
- In topic "A flexible approach to finding representative pattern sets", [8] author tells us that data will be mined with the help of pattern that is called min RP-Set.
- In topic "Efficiently using prefix trees in mining frequent pattern sets", [7] data will be mined with FP-trees for location based system
- In topic "Efficient filtering algorithm for location aware publish/ subscribe ", [1] researchers research on the concept of a location based system with RT tree. Many applications exist for location aware publish/subscribe system such as Groupon, Location-aware ad sense, Tweet delivery.
- In topic "keyword search on spatial databases",[2] researchers research on the concept of a location based system with an IR^2 tree (Information retrieval R-tree) and search with the use of the spatial-keyword.
- In topic "Hybrid index structure for location-based web search", [10] author describe that it is a web application in which user find content with the help of location which is related to content.
- In topic "Index structures for selective dissemination of information under the Boolean model", [9] researchers research on location based system and get a result that when location based system was existed in the world of internet approximately 1994 to 1996 then how data was found or collected with the help of new filtering technique in indexing forms.
- In topic "Matching event in a content-based subscription system", [16] researchers research and tells us that this particular system was developed in which data will be found which is related to the particular group.
- In topic "Models and issues in data stream systems", [18] researchers research and tells us that this technique is developed for finding many single data in one time.
- In topic "Semi-probabilistic content based publish-subscribe", [20] location based system application is developed in which a third person distribute the information between user and server.

Many researchers research on location aware publish/subscribe system and find a very beneficial result. Location based system is useful in current time. Every user is getting the benefit of this technology. Everyday new technology is developed which gives the best result always in compare to the previous version. In current time no one has time so everyone wants to get a quick and fast result. For the purpose of the fast result, new technology is developed and by which current world is called the technical world.

I research on this topic and find some previous work which is completed by some researchers and find that what new I can do on location based system by which everyone can get the benefit and this system provides good facility to their user.

Title	Description	Outcomes
Efficient filtering algorithm for location aware publish/subscribe[1]	RT tree-based indexing is developed and develop a filter and verification framework and use technique which gives result without using the verification step.	It gives better result with high-performance speed and good scalability
Keyword search on spatial databases[2]	IR^2 tree is identified for searching place with spatial keyword	It is a combination of R-tree then it gives better and faster result.
Efficient retrieval of the top-k most relevant spatial web	the new framework is indexing and	It gives a good scalability and better

objects[3]	search on the basis of top k text retrieval	performance.
Seal: Spatial textual similarity search [4]	LBS system searching location on the basis of particular region.	It gives the performance of searching in very high speed.
Collective spatial keyword querying[5]	we search place on the basis of the approx result and the actual result	It provides less cost for searching the place.
Efficiently using prefix trees [7]	The place is searching with the help of novel array-based searching.	Because of this technique, it takes less time to traverse FP-tree.
Finding minimum representative pattern sets [8].	I searching pattern technique is performed with min RP set and Flex RP set	It gives result in very few times with the help of pattern
Hybrid index structure for location-based web search[10]	hybrid index structure that integrates inverted files and R*trees for finding the location	It gives the efficient result.

The location based system is identified in the world of the internet since 1989 and till today time everyone can use it very easily. Since 1989 every researcher's research on the location based system and find a new thing in above table I give a brief description of the location based system and tells that firstly location based system is developed upon web objects and for the easing of user location based system is worked upon many devices like android phones etc.

In the location based system it worked many ways according to time to time like firstly it collected data on user and then find the result and after a new researchers research on this topic and provide a result with a high performance like the result is found on the basis of the array. After that new researcher's research and provide a result that location based system will give result according to exact or approx. the result which is definitely faster than the previous version then many techniques is available like user find a location with the help of pattern and min RP-Set and Flex RP-Set is identified which gives also a better result. After that RT Tree and IR^2 Tree and R^* Tree is identified then pull model or user initiated model is identified in which user can ask a particular location then they get find it. After all this technique I think now push model or server initiated should be implemented by which user get an extant report with the help of Binary Search Tree which is helpful for delivery of fast retort. The location based system can be applied in anything which is related to location. With the help of data mining, it can mine location and provide a report. Many filtering algorithms are developed by many researchers so in the implementation of push model or server initiated model I want to use binary search tree because binary search tree perform the searching operation in increasing or decreasing order and it will apply on pin code of location so binary search tree is faster than any other filtering algorithm. Many authors during 1989-2016 are working on Location Based System and develop new technology which provides a result from their previous version. A lot of future work is available on the location based system and many filtering algorithms are available for filtering location and provide the best result. In future work

CONCLUSION

Server initiated or push model is compulsory for the current generation. The user has needed to server initiated model or pushes model. Present time whole world is getting the facility of internet. The Internet is the heart of technology. The location based system is a feature of this internet world. Every user gets the facility of the location based system. Because of this technique, many users are familiar with the unknown place I implement server initiated model which is the requirement of present situation because day by day many new things exist in this internet world. Every user is very high-tech. No one has more time to waste it so server initiated model helps users for saving their valuable time. The concept of the location-based system is available to many times. Google map GPS system provides very beneficial facility to users. It is not a new thing but day by day it is available in better features. Many algorithms are used for high performance or use less time like mine RP set, flex RP set, RT tree etc. So I implement server initiated model or push model with a binary tree in which user has no need to ask about particular location. In push model or server initiated model server will tell user's current location immediately. So it will be very useful for users because the user will

know his current location and complete their work which is related to his current location and save his time. Because today time is very precious for everyone

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