Optimal Meeting Point Notification for Moving groups of Users in Network Region

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ABSTRACT

In Efficient notification of the meeting points for moving groups of user required time to call everyone to finalize the meeting point. This is the time consuming and costly process. They won't be an essential need to call everyone for finalize the meeting point. User finds the meeting location exactly. Due to his particular safe region, with the help of Trilateration and Haversine algorithm brings to find location. Circular safe region of algorithm widely helps to find the user current location. The notification sends to all groups of users and users check the meeting point. After getting the alert from an application, particular user will be ready to reach that destination i.e. meeting point which is optimal in nature. Thus, to minimizing the communication frequency and also reducing the unnecessary computational work load at server.

Keywords: Query processing, spatial databases, Shape, Processor, Architecture, Servers, Mobile Processor, Parallel Architecture.

I. INTRODUCTION

In proposed system, we study the continuous monitoring of moving groups of user in network region. The safe region concept has been extensively studied for saving the communication cost on processing continuous queries. Safe region gives users optimal location and calculate the optimal meeting point for every group of the user, using the divide and conquer algorithm. Due to availability of inexpensive position locators, cheap network bandwidth And mobile devices with computation and storage capabilities, location based services are gaining increasing popularity. We are trying to create real time application. This application reduces the frequency of communication. Finding optimal meeting point in real time to reduce time exhaustion.

II. METHODS AND MATERIAL

A. Software Requirements

In Efficient notification of meeting points for moving group is most vital role in today's life. In old system, user required time to call everyone for finalizing meeting point. This is time consuming and costly process. In our System user register on application then create group and find meeting point.

A novel checking issue is proposed, Gathering Point Notification (MPN) for various moving clients: given a gathering of moving clients U and a set of purposes of investment constantly reports the ideal gathering point to clients in such that the most extreme separation between any client is minimized .

A.1 Software System Configuration.

S No	Requirement	Specification
1	Operating System	Windows7 and above
2	Application Server	Tomcat Apache 6.0
3	Front End	Java
4	Scripts	XML,JSON
5	Server side Script	Java Server Pages
	Database	Mysql .0,SQLlite
	Database Connectivity	Operhelper

B. Hardware System Configuration.

S No	Requirement	Specification
1	System	Pentium -IV 2.4 GHz
2	Speed	Requirement 1.1 Ghz
3	RAM (Android SDk and Eclips)	3GB(min)
4	Hard Disk	100 GB
5	Key Board	Standard Windows Keyboard
6	Mouse	Optical
7	Monitor	15 VGA Color

III. Preliminaries and System Architecture

We first provide the definitions for distances, the optimal meeting point, and safe regions. Unless otherwise stated, we denote both a user and her location by ui .Table1 sum-maries the notations to be used throughout the paper.

Definition 1 (Distances): Let kp be the Euclidean distance between points p and l. The minimum distance and the maximum distance from a point p to a set/region S.

Definition 2 (Optimal meeting point): the point in P with the smallest $\|p_0,U\|$ Given a group of users U and a data set of points P, the optimal meeting point p_0 is max . It is also called MAX-GNN .

Definition 3 (Independent safe region group): Let m be the number of users in U. A group of regions R is said to be independent if the optimal meeting point p_0 is the same for every instance of user locations.

Definition 4 (Maximal safe region group): R said to be a set of maximal safe regions if no other (independent) set of safe regions R' satisfies: R 'is not equal to R*.
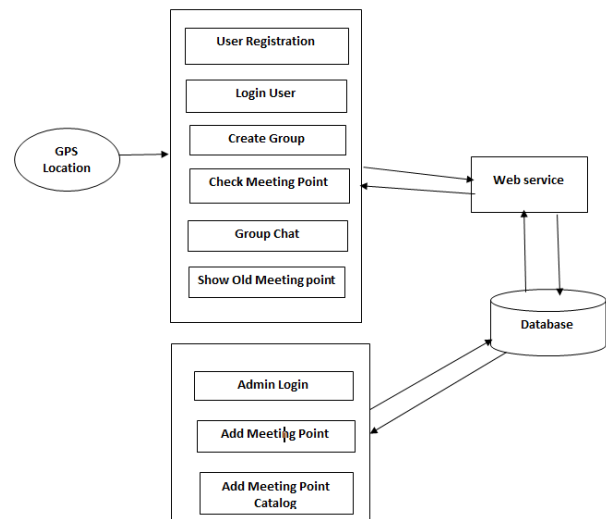

Fig -1: System Architecture

IV. RESULTS AND DISCUSSION

In Efficient notification of the meeting points for moving groups of user has two module namely 1) web portal. 2) Android application. These modules are divided into subparts 1) In web portal we are design actual admin interface. In admin interface part consists Admin section only, for this we design login page for admin. Fig 2. The web portal stores all information of users who logged in through android application.
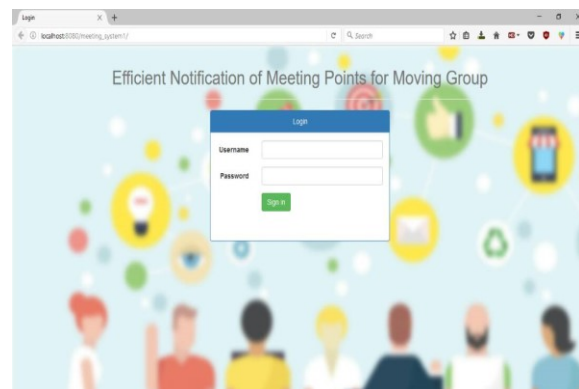

Fig.2

Admin section consists 1) Add meeting point category and 2) Add meeting point details. In meeting point category admin has to add category of places, so that when user register through application it will displayed in sign-up form. For web portal, we are using JSP (Java Server Pages). JSP is a technology that helps software developers create dynamically generated web pages based on HTML, XML etc.

Each and every time when new user logged in with form he/she has to field all detail on that form ,this information is saved in database. Meeting point category i.e. hotel, club, garden, mall, hospital etc. it is easy to understand user that what type of place it is. Fig.3
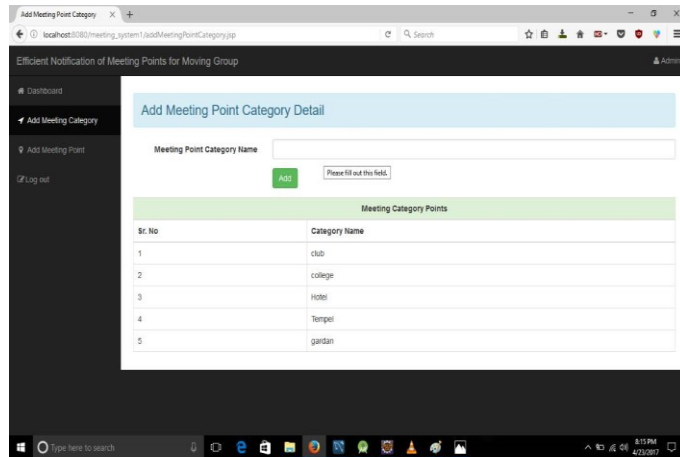

Fig.3

In add meeting point category details section we are search the places. In that we are added all details related selected places, then with the help of trilateration algorithm we get longitude and latitude of location, which is search by user. That helps to calculate optimal meeting point in our project.

For Mobile Application we design android code. This section consists 1)user interface 2)log-in page 3)group of users 4)meeting point details. We design user interface in simple format as show in Fig.4 it consists login and register button. User log-in by entering user name and password, if user is not register with register form then he/she need to register first through register button.it consists user full name, address, phone number, user name, password, and interest of category. Interest has dropdown list in which is list of interest of places inserted by admin in admin part.
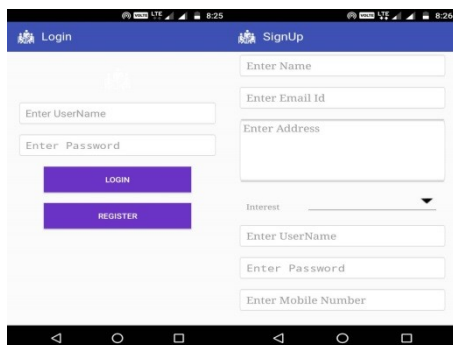

Fig.4

As user successfully login with their user name and password, he/she will see all the other user which is currently log-in with the application. After login part user can create group of users in application. Fig. 5 as per multiple user has multiple point of interest one optimal point is calculated. Calculated optimal point is update on each users of group.
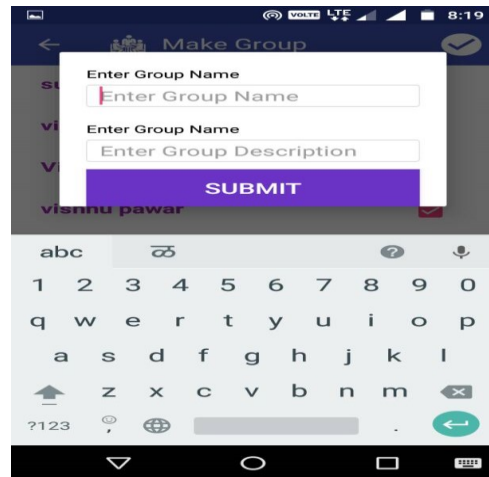

Fig.5

V. CONCLUSION

In this proposed system, we are focusing on minimizing the communication cost for monitoring the optimal meeting point for a group of users. We propose the concept of independent safe region group, in order to reduce the communication frequency of users.

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