

## Review of Recommendation on Location Based Services

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**Abstract**— In every Era “Location” is a strong component of “Mobility” Location based services (LBS) are services offered using mobile phone by taking mobile’s geographical location. The proposed system is providing location based services and offers with respect to user interest . Vendors are allowed to post and edit an advertisement for users. The system contains various modules such as advertising , Social program, Tourist place, Parking place, Emergency calls etc.

The system uses apriori algorithm for mining frequent ratings from user. This information is used to provide popularity of location. It also provides user’s feedback, ranking based suggestion in secured manner. The purpose of this system is to notify the user based on their preferences and their interest in the particular area and notify them using android application. This will lead to lower advertising costs and expenditures also save the time of user for finding the located area of ads with help of GPS.

**Keywords**-Mobility, GPS, Android application, location based services.

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### I. INTRODUCTION

A Location Based Service is a mobile information service that uses location data to offer variety of application, which accessible by mobile devices to end user via internet. The technology is used to understand consumers location and provide location based services on their mobile devices. Location-based services hinges around the fact that wherever we go these days we always carry a mobile with us. And most of us quite happily share our location data with the various apps we use. This presents an opportunity for advertisers to personalize their messages to people based on their current location.

Location based services are gaining prime importance in our increasingly mobile and highly (Information Technology) IT enabled world. With modern legislation and interest in utilizing Geo-spatial information for providing practically useful information to users of mobile services the scope and capability of informing, alerting and involving the user is evolving.

“Location” is invariably a very strong component of “mobility”. A rapid evolution in Location Determination Technologies (LDT’s) coupled with the advances made in the field of wireless in recent years has given rise to the possibility

of precisely locating a mobile phone. This has opened up a plethora of a new set of wireless applications, known as “Location Based Services” (LBS).

### II. LITERATURE SURVEY

Location Based Services has developed in a gradual and progressive manner over the year. In this section of the review of literature

Ariel Pashtan says “A context-aware tourist information system” that leverages Web services and XML technologies for its implementation. We review notions of context as they relate to tourists, and provide relevant tourism scenarios that helped drive our design. Our system architecture is Web services-based and includes a context manager element that manages both dynamic and static context. The elements of context in our work are location, time of day, speed, direction of travel, personal preferences, and device type[1].

Praveen Kumar says about “Location Based Services” provide the users a set of services which originate from the geographic location of the user’s mobile device. Using these services it is possible for the users to find and locate other persons, vehicles, resources and also to provide

location-sensitive services, in addition to tracking their own location [3].

The explosive growth of social networks has led to prolific availability in customer tastes and preferences. This data can be exploited to serve the customers better and offer them the advertisements they would be delighted to see. To provide relevant advertisements to consumers, one has to consider the location of the consumer as well. The consumers will be highly contented if the offers shown to them are easily accessible in nearby areas. In this paper, we propose a model combining the idea of social and spatial data to provide targeted advertisements. Social data is acquired through user's Facebook profile and location of the user is found with the help of Beacons[5].

To meet the request of real-time and distributed data storage of the advertising system, the Qun Wei, presents the region matching query technology based on GeoHash algorithm, large data distributed storage of MongoDB database and query technology of Solr search engine on multi dimension query. With it, advertisers achieve fast delivery and promotion of advertising and quick review of ad serving performance. Meanwhile channel users can timely access to advertising information in accordance with their own needs, greatly save the cost of advertising and increase the timeliness and accuracy of advertising[6].

### III. PROBLEM STATEMENT

Location Based Services are information services accessible with android devices through the mobile network and utilizing the use of the location of the mobile device. "Design such a system which provides location based services involves user's feedback, notification and popularity of places using ranking based suggestion in secured manner".

### IV. PROPOSED SYSTEM

The purpose of LBS is to Display Services according to the set preference by the user and no unnecessary display of services to the user. The main objective of the LBS is to evaluate the user position through the GPS/Network Provider and display services in terms of notification to user ranging within from the that location, which not only saves lots of time but also gives faster services, advertising and marketing. The whole process of evaluating user location is done in the back-end by continuously tracking its longitude & latitude which will lead to proper accuracy of position of user. From user point of view there is no need of searching ads in newspaper/banner as LBS application will be much faster in real time.

The location co-ordinates of the users mobile is detected by the LBS application installed on the users mobile. These co-ordinates are then sent to the back end of the administrator

website that is hosted on the server. At the back end it checks under which range the coordinates fall and what are the preferences selected by the user. According to these constraints the various services and offers within that location are fetched and again transferred to the android application on the users mobile device.

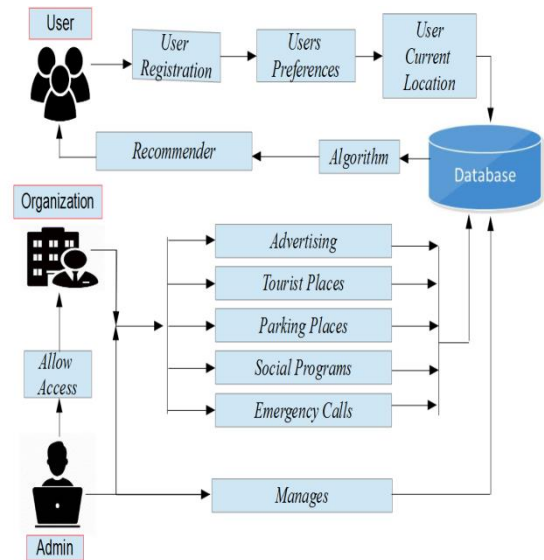


Fig1- Data Flow Diagram

An administrator website is developed to store all the services and particular offers. The admin will have all the rights to register different shops under various categories and their location as well.

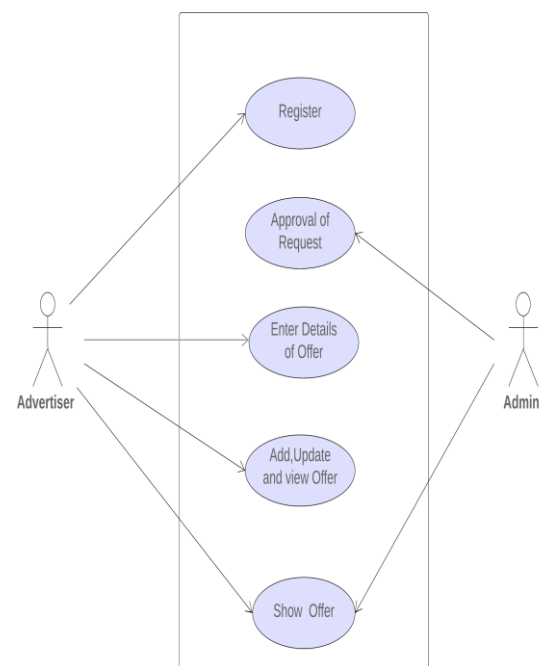


Fig 2a-Use Case Diagram 1

The shop owners can have their own login id and password, so that they can add offers and deals independent of their location. It contains all the information about different users of the application. It also contains data of different offers and advertisement of various shops and retailers according to their locations. It also maintains information the preferences entered by user.

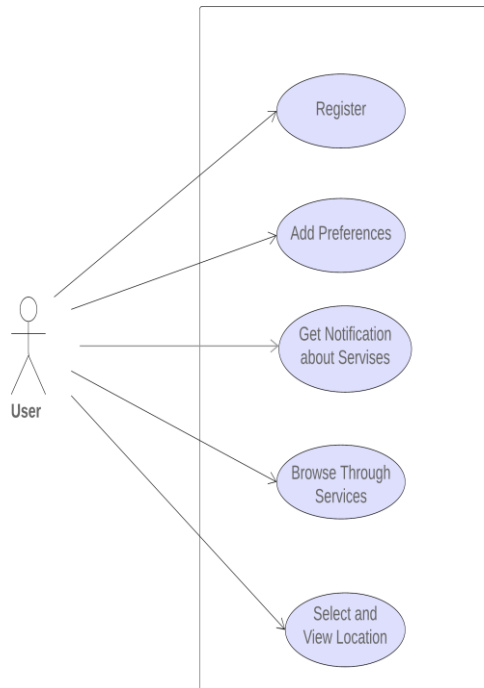


Fig 2a-Use Case Diagram 2

## V. TECHNOLOGIES TO BE USED

### Hardware Requirement :

- Processor –Core i3.
- Bus speed - 2.5 GT/s DMI.
- Hard disk - 160 GB and
- Memory size – 1GB RAM.

### Software Requirement :

- jdk 8 or above
- Xamp server/Mysql workbench
- Apache tomcat server 7.0

Google maps and directions API are used do provide direction and map. Different searching algorithm can be used for fetching the offers from the database.

## VI. CONCLUSION

Thus, the aim of this paper is to build an advertising system which helps to find the user preference and their interest in the particular area and notify their interest using android application advertisement with the help of GPS into the user located area. Web services are continually generating new business ventures and revenue opportunities for internet corporations. Targeting helps to improve the effectiveness of advertising it reduces the wastage created by sending advertising to consumers who are unlikely to purchase that product, target advertising or improved targeting will lead to lower advertising costs and expenditures also save the time of user for finding the located area of ads with help of GPS. GPS –enabled device helps to find the user prefer area for the particular Ads in area of user where they want go. With the help of GPS it is possible to trace the exact location on globe by monitoring and detecting the place and get aware the persons while searching for exact location in large area of city and so on.

## VII. REFERENCES

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