

TRAVEL SEQUENCE APPLICATION

Danya M¹, Mahima S¹, ThaaraniA¹, ChittibabuK²

¹Student, Department of Information Technology, R.M.K Engineering College, Kavaraipettai, Tamil Nadu, India

²Associate Professor, Department of Information Technology, R.M.K Engineering College, Kavaraipettai, Tamil Nadu, India

Abstract - As the world is stepping towards the digital way, most people tend to select best of methods so that would make their work effortless. Usually People travel to many unknown places and it would be difficult for them to locate the places like schools, hotels, hospitals, temples, ATM etc... Even though the user gets help from people to reach their location, at some situations the user may find it difficult when people are not around them for help. Due to an misinterpretation in route or may be the person could not understand the foreign language, unfortunately he may land up in an unwanted place. To puzzle out this issue with the help of the technologies an android application is developed. So when the user visits an unknown location he may reach his destination without any difficulty. Global Positioning System (GPS) is the main functionality of the travel sequence android application. The application requires the users to mention their source and destination so that it can provide them their desired locations and guides the user to his selected location with ease.

Key Words: Point of Location(POI), GPS(Global Positioning System), Google Map, Android, LSBN.

1. INTRODUCTION

The main purpose of this project is to develop an user-friendly application that guides the user to an point of interest. Android application is an open source mobile operating system massive user base and simplified mobile app development process. The travel sequence android application provides the user with the categorical options like hospitals, hotels, schools, tourist places etc.. So that the user could select his required destination location with ease. This paper is organized as follows. Section 1.1 illustrates the Literature survey. The proposed work makes use of android application that links with the social media to suggest the user to the location. In the related works, a variety of methods have been prescribed by various authors to solve this problem of locating places like atm, hotels. The proposed system of the application is

illustrated in Section III; the Section IV illustrates the Conclusion and future Enhancement.

1.1 LITERATURE SURVEY

Prof. Sarita Sapkal, Jakil Syed, Ishan Gonekar, Santosh Dhaigude, Amit Langoreproposed a methodology named, “**A Survey on Social Media Based Personalized Travel Sequence Recommendation**” that a personalised travel sequence system uses the user’s facebook data like tags of photos , location of places visited by the user and thus recommends the users automatically the place to visit for the travellers.[1]. This system mainly focus on the travelling packages used by the companies and recommends places based on the social media tags.

Vincent W. Zheng, Yu Zheng, Xing Xie, Qiang Yang proposed a system titled, “**Collaborative Location and Activity Recommendations with GPS History Data**” which proposed the system which worked on the problem of time-aware point of location recommendation, which aims at recommending a list of point of locations for a user to visit at a given time. To exploit both geographical and temporal influences in time-aware point of location recommendation. [2]. The disadvantage is taken a more time.

Fei yu, Zhijun Li, Shouxu Jiang, Shirong Lin projected a methodology named, “**Point-of-Interest Recommendation For Location Promotion In Location -Based Social Networks**” which selects the list of POIs with the greatest influence for recommending users. In social networks, influence is often used to help businesses to attract more users. Each target user has a different influence on different POI in social networks[3]. The main disadvantage of the paper is that it provides point-of -location to the user only if the user has visited the places according to their social media.

Peiliang Lou, Guoshuai Zhao, XuemingQian, Huan Wang presented a technique captioned, **“POI Mining and Recommendation”** proposed system content information on LBSNs with respect to POI properties, user interests, and sentiment indications. Model the three types of information under a unified POI recommendation framework with the consideration of their relationship to check-in actions. [4]. The disadvantage is contain only small dataset.

JungeShen, JialieShen, Tao Mei, XinboGaoproposed a system titled, **“Landmark Reranking for Smart Travel Guide Systems by Combining and Analyzing Diverse Media”** presented a novel query-dependent landmark ranking system based on heterogeneous travel information fusion to facilitate a smart travel guide. The proposed system gets the initial ranking list of landmarks via text matching. [5]. The advantage is, maximize the satisfaction and minimize the information load. Less efficiency is a disadvantage of this paper.

2. PROPOSED SYSTEM

In this section, the application is designed in such a way that it works on both server and client side. The general design of the server design is portrayed in figure-3.1. This framework is designed in such a way that it works to add point of location in the Google Map. The general design of the client design is portrayed in figure-3.2. In the client side, the essential information to locate the place the user is searching is given to the application by the user. once the information is available the application generates a number of point-of-location to the user and from those location the user selects the preferred location.

The Figure-3.1 and Figure-3.2 represents server side and client side respectively.

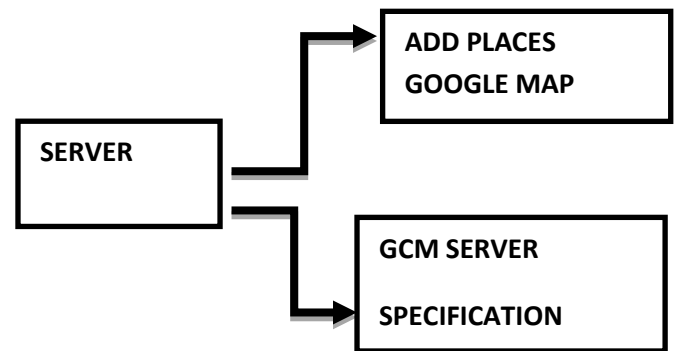


Figure -3.1 Server Side

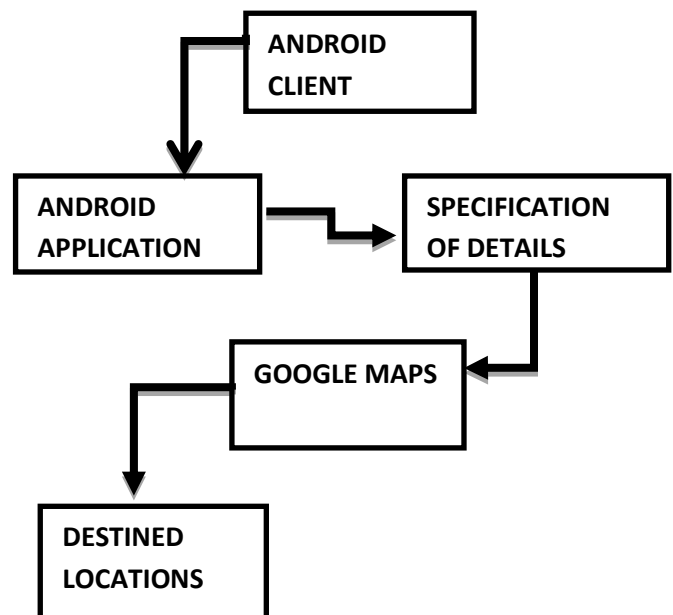


Figure -3.2 Client Side

The The travel sequence application comprises of number of modules where each modules has its own functionality. The modules of the android application includes,

- Place Registration
- User Registration
- Specification of Place
- Path Finding
-

Each of these modules contribute to the working of the travel sequence application. The Administrator of the application has to manage the server side of adding the point of location(POI) to the Google Map service provided by the android handset.

2.1 PLACE REGISTRATION

This module mainly works on the server side of the application. The place registration module is maintained and handled by the administrator of the application. In this application the administrator registers the location of hospital or hotels or tourist places on the Google map service. Along with adding the location of a place, the administrator also adds additional information such as the official website of the place, the review collected from people are also included along with the registered location.

As this module works on the server side, GCM server has to be started before adding the location on the map. Once the GCM server has been initiated the administrator can add places according to the category supported by the application. The category supported by application include hotels, hospitals, tourist places, schools and ATMs.



Figure -3.3 Place Registration

The figure 3.3 depicts the place registration UI of the application.

2.2 USER REGISTRATION

This module works on the client side of the application. In this module the user registers with the application. The user enters the personal informations like



Figure -3.4 User Registration

name, mobile number, MailID of the user, username and password of the user are registered with the application. These information are stored on the mysql database and these information are used for validating when the user enters into the location. The user also sets up the ip address so that the location of the user can be automatically detected by the application. In this module the user personal information are updated in the mysql database and when the user tries to login into the page the login information and the username and password entered in the personal information are validated and once the information provided is verified the user enters into the application.

This module also include the login function for the user to use the application. if the user enters the username and password and if the user does not sets the ip address then the user will not be able to login into the application. only when all the information like username, password and ip address are setup the user can login into the application. The figure 3.4 depicts the user registration page of application.

2.3 SPECIFICATION OF PLACE

This module is the main functionality of the travel sequence application. The module provides the user with the options to select the category like hospitals, hotels, tourist places etc... when the person enters the category and source and destination of his travel the application matches the category, source, destination on the server side and gives back the result of number of locations that has matched with the server side with all the requirements mentioned by the user. This module uses the GPRS service to track the location of the user. The UI for this module is designed in such a way that the once the user enters the

requirements and clicks the search button, they are provided with a number of point of locations with their source and destination requirements.

When the user enters the source and destination and the category options and clicks on the search button, it requests the user to on the location services to provide the route to the destination. The application also contains an additional feature to search for the nearby location when the user sets up the ssid of the android handset. The figure 3.5 specifies the specification page of application.

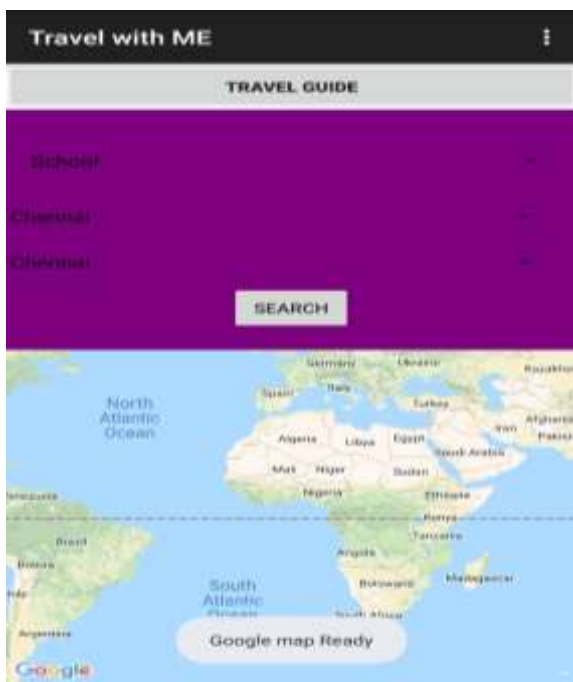


Figure -3.5 Specification page

2.4 PATH FINDING

This module guides the user to his point of location when the user selects from the many number of resulted location. This module provides the user with the best route to reach out to their destined locations. This module require the location service of the android handset to be on so that the user can find the best route for his destination. If fail to on the location service the user may face difficulty in reaching to the destination.

In the module, the user receives an number of point of location according to their desired search. Along with these location the application provides the user with their official url of their website and also the review about the place they wanted to visit. Once they decide from the number of point of location to visit a

place, they are required to touch that point of location and click on the arrow mark in the google map integrated to the application. once the user clicks on the mark they are taken to the map application in the android handset to find the best route to the selected location.

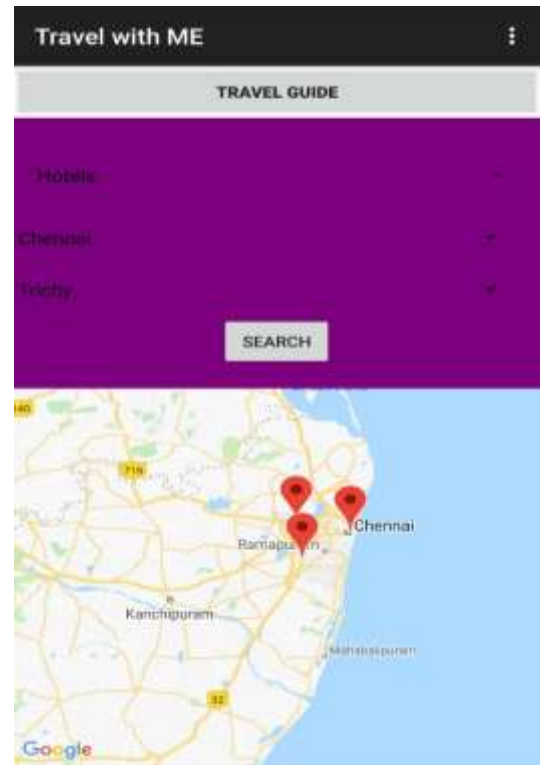


Figure -3.6 Resultant Locations

The figure 3.6 depicts the resulted location available from the specification provided by the user.

3. CONCLUSION

The use of the android application helps the user to travel to the destined location with ease and also the application provides the user the best route to reach to the destination. In case of this application the places like hospitals, hotels, schools are already registered in the Google map with the help of the system administrator. Additional information are added along with the locations such as the official website URL of the place and also review about the place. Upon addition of these information, the user selects his estined location with ease from a number of returned results. The future scope for the application include that a notification of places like hospitals, hotels can be

received by the user automatically when he travels through the place.

REFERENCES

- [1] Jakil Syed, Ishan Gonekar, Santosh Dhaigude, Amit Langore: A Survey on Social Media Based Personalized Travel Sequence Recommendation: International Journal of Innovative Research in Science, Engineering and Technology, Vol. 7, Issue 5, May 2018.
- [2] Vincent W. Zheng, Yu Zheng, Xing Xie, Qiang Yang: Collaborative Location and Activity Recommendations with GPS History Data: ACM, 2010.
- [3] , Zhijun Li, Shouxu Jiang, Shirong Lin: Point-of-Interest Recommendation For Location Promotion In Location -Based Social Networks: 18th IEEE International Conference on Mobile Data Management (MDM), 2017.
- [4] Guoshuai Zhao, Xueming Qian, Huan Wang: POI Mining and Recommendation: IEEE Transaction on multimedia, 2016.
- [5] Jialie Shen, Tao Mei, Xinbo Gao: Landmark Reranking for Smart Travel Guide Systems by Combining and Analyzing Diverse Media: IEEE Transactions on Systems, Man, and Cybernetics: Systems, Volume: 46, Issue: 11, Nov. 2016.
- [6] T. Tezuka, and K. Tanaka: Mining and visualizing local experiences from blog entries: Database and Expert Systems Applications. Springer, 2006, pp. 213-222.
- [7] S. Hattori, T. Tezuka, and K. Tanaka: Automatic generation of multimedia tour guide from local blogs: Advances in Multimedia Modeling, pp. 690-699, 2006.
- [8] J. Tang, X. Hu, and H. Liu: Content-aware point of interest recommendation on location-based social networks: in Proceedings of 29th International Conference on AAAI. AAAI, 2015.
- [9] L. Zhang, Z. Ma, X. Xie, and W. Ma: Recommending friends and locations based on individual location history: ACM Transactions on the Web, vol. 5, no. 1, p. 5, 2011. 6
- [10] Changhu Wang, Nenghai Yu, Lei Zhang: Trip Mining and Recommendation from Geo-tagged Photos: 2012 IEEE International Conference on Multimedia and Expo Workshops.