



Android App for Creating a Map of the College to be used with visitor localization

Swapnil Vaidya¹, Dhiraj Rahane², Aniket Gavhane³, Vaibhav Shinde⁴, Khushbu Shaikh⁵,
Prof. Ansari S.W⁶

Student of Department of Computer Engineering, S.N.D College of Engineering & Research Center, Yeola¹⁻⁵

Professor, Department of Computer Engineering, S.N.D College of Engineering & Research Center, Yeola⁶

Abstract: It creates problem to visitor to reach easily and timely to their desired location. So, there must be a system that will guide and help visitor and also students to get to their desired places from their current location. Almost all people including students use smart phones. Almost all people including students uses smartphones. So a map application will be most helpful to locate desired place and shortest path from current location. Finding a place in a new location where visitors have no experience and clueless about it. This seems like getting lost in a maze and there is no easy way to reach out destination. This paper introduces an application for android mobile, which is implemented to provide the android mobile user to add, remove and review specific locations on the online map. The proposed applications also presents the basics navigation operations like showing directions with the optimal path between source and destination and calculating the distance and expected driving time. Google Maps APIs, Google Direction APIs, PHP, JSON and MySQL have been integrated and used in this application to obtain solutions

keywords- UUB i.e.UltraWide Band, Android App, Navigation, Current Location.

I. INTRODUCTION

There are no facilities to find places like administrative building, departments, library, canteen, etc. in the campus and how to find those places from current location. The new faculty members, staff and visitors also face same problem inside campus. To avoid all these problems college or organization should provide a solution for this. So, mobile application is the best solution for this problem. Therefore, maps are the best way to provide locations. Mobile application may be used along with integrated map of the campus. There are no facilities to find places like administrative building, departments, library, canteen, etc. in the campus and how to find those places from current location. The new faculty members, staff and visitors also face same problem inside campus. To avoid all these problems college or organization should provide a solution for this. So, mobile application is the best solution for this problem. Therefore, maps are the best way to provide locations. Mobile application may be used along with integrated map of the campus. Navigation system plays an important role in exploring new places for visitors. Navigation delivered through Location Based Services (LBS) is a framework implemented in this project. Location-based services are defined as all kinds of service that make access to the geographic location of an object. This object could be human or non-human that trigger its location as a service.

II. LITERATURE SURVEY

Sr.no	Paper	Author	Description
1	Android APP for Creating A Map Of The College To Be Used With Visitor Localization.	Prof. Sujata Kadu ¹ , Ms. Ankita Dhekane ² , Ms. Meghana More ³ , Ms. Mrunali Bansode ⁴ , Mr.Raj More.	These application works with coordination with UWB in real-time environment to keep track of the places and points. This also provides users with locationbased information a location tracking algorithm based on wireless network signals is created.



2	Mobile Application Implementing Location Based Services Framework with Google Cloud Platform Integration: SSRU Development Case	Shutchapol Chopvitayakun.	This application is aimed to serve thousands of new visitors who come to SSRU every year for several purposes. All data, traffic, and statistics of users will be stored on Google Cloud Platform for further analysis
3	Design and Implementation an Online Location Based Services Using Google Maps for Android Mobile.	Dr. OMAR A. IBRAHIM, KHALID J. MOHSEN	This project help tourist or any user use it to add place on map or can delete place from map also can calculate route, duration and distance between any to point or place on map.

III. PROPOSED SYSTEM

In our project we are going to use UWB because from our literature survey we can say that it is the most accurate and promising technology. It is a communication channel that spreads the information or data over a wide range of frequency spectrum because it occupies portion of the frequency spectrum that is greater than 20% of carrier frequency.

To avoid all these problems college or organization should provide a solution for this. So, mobile application is the best solution for this problem. Therefore, maps are the best way to provide locations . Mobile application may be used along with integrated map of the campus. The best way to get indoor map is UWB i.e. Ultra WideBand.

Application will be integrated with UWB to get current location.

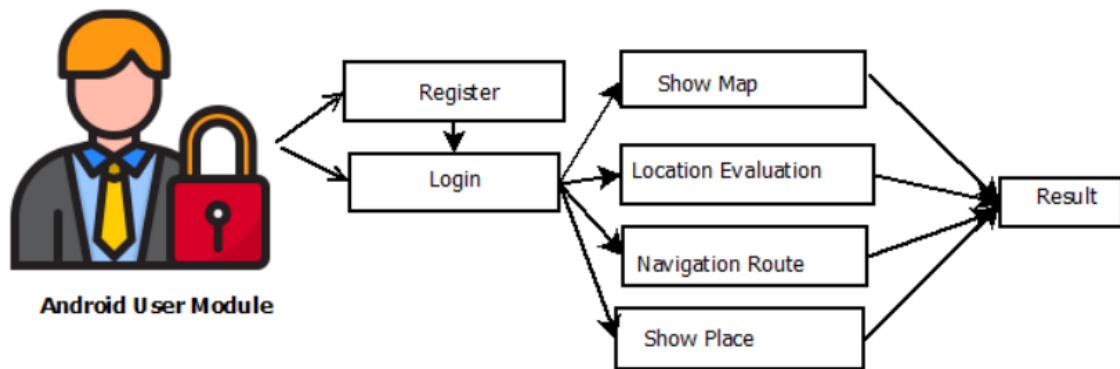
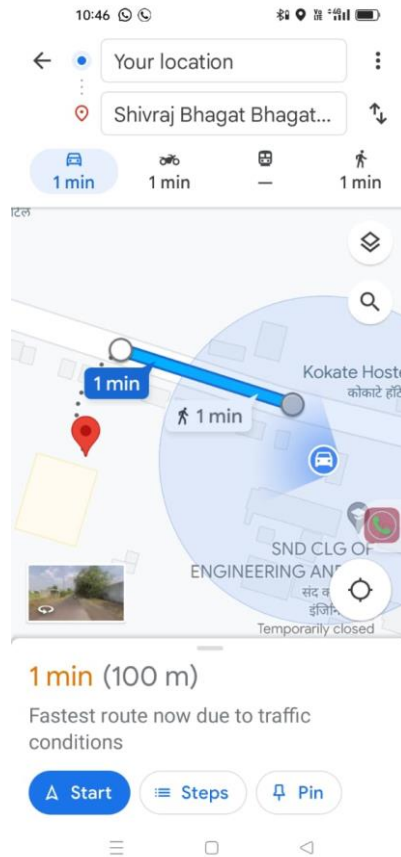


Fig. Architecture Diagram



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Implementation Screenshots



**Hardware and Software Requirements****Hardware requirements**

Processor : core 2 duo or more with speed 2 GHZ

Ram: 2 GB or more.

Software requirements:

Operating system: windows 7/8/9/10

Technology: Android Studio, Netbeans, xampp.

FUTURE SCOPE

All services delivered through an application run on user's mobile phones or smart phones with Android Operating System. Moreover, it also provides other relational information. w. User can zoom in or out current location on the map to compare it with the real location onsite or users can compare exterior pictures of each building with real vision onsite to verify a correct route. In this application, the user can add and remove place from the map, other application like Google maps cannot allow to user this property, Google maps have Google place (separate application) to allow user to find near place and review the place information but cannot allow user to add place on map.

CONCLUSION

This work applied Location Based Services framework on an Android mobile application called SSRU Map. This application deployed Google Map Platform to retrieve all features based on Location Based Services framework. This paper has demonstrated an online mapping application that was successfully developed using Google Maps API , Google Direction API, JSON, MySQL Database and PHP. These tools are open source and high reliability. This project help tourist or any user use it to add place on map or can delete place from map or review the information about any place on map, also can calculate route, duration and distance between any to point or place on map. By using this android application visitors can able to localize or get able to navigate the places of the college campus like class rooms, library, labs, offices of HODs of different departments, exam centre ,etc. This application also navigates the direction that you wish to visit.

REFERENCES

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- [3] Mobile Application Implementing Location Based Services Framework with Google Cloud Platform Integration: SSRU Development Case, Shuchapol Chopvitayakun is with Information Technology Program, Faculty of Science and Technology, Suan Sunandha Rajabhat University, Bangkok, Thailand.
- [4] Design and Implementation an Online Location Based Services Using Google Maps for Android Mobile, Omar Abdulmunem Ibrahim Al-Dabbagh (PhD) Ibrahim Al-Dabbagh (PhD) is currently a head of computer and Internet center/ Mosul university and a lecturer at the computer science department, College of Computer Science and Mathematics at Mosul University/ Iraq, Khalid Jamal Mohsen currently a master student in computer science at Mosul University. Khalid obtained his bachelor in computer science from the Same college in 2011.