

University campus Event Navigation System

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Abstract – As now a days, many events takes place in a college campus and it is very cumbersome to register for such events if the number of colleges is more. So, this technology provides an android app to the participants so that they can register for such events and get real time updation for a particular event. The main administrator will edit and add events and even can delete the events. The system also provides participants with the facility of google map so that it becomes easy for them to reach a particular event. Other colleges can also add the events which takes place in their college. Mobile based application which we are developing can provide valuable information regarding a particular event in particular college and guide participants to find the desired location. This application provides functions such as finding current location of event, route direction to the particular event using GPS and gives description about it to the user. Nowadays most of the applications like google map and GPS help the people to navigate through a particular environment. As there has been immense use of smartphones with android operating system so it is much good if the applications are specifically developed for the android platform.

Keywords- Android SDK, Google Map, Android platform, Location based service, GPS

I. INTRODUCTION

Android mobile becomes the most popular in the smart phone market because android is an open source mobile operating system based on Linux with java support and it comes with free and open source software licenses. Location-based services(lbs.) provide personalized services to the mobile clients according to their current location. University Campus navigation are nowadays far more than merely devices to communicate based on new techniques like GPS and sensors, compass and accelerometer, that can determine the orientation of the device. In the context of this work a University Campus navigation application for the College campus is developed enabling the user to find specific locations on campus and offers him the possibility to present the campus area environment via augmented reality. Many events are held throughout the year and there are many ways to find where a particular event will be conducted and in which college so that users can participate in that event through mobile application .we are developing web site for college admin and system admin and also application for mobile user Mobile phones are nowadays, far more than merely communication devices. It will also

generate OTP on registered mobile number. This University campus Event based system also provides the facility of notification about a particular event to the registered user and user who just uses this application can click on that event and can get the updates of that event.

II.LITERATURE SURVEY

In [1]“Event Based Campus Navigation System”Sunil Bendre^{#1}, Narendra Patil^{#2}, Dhananjay Kanawade^{#3}, Sagar Kandekar^{#4}, Rutuja Kirpal^{#5}

The paper campus assistant application on an android platform states that Nowadays most of the applications like google map and GPS help the people to navigate through a particular environment. As there has been immense use of smartphones with android operating system so it is much good if the applications are specifically developed for the android platform. So the campus assistant application on an android platform provides many functions for the navigation with accuracy as an important factor. In this paper they have majorly focused upon the guiding and navigation as two common services at certain times. This paper also gives much importance to the Point of interest(POI). Major disadvantage of today's technology in navigation is POI so this paper looks into it as well. Another issue is how can we provide guidance to the user to give him accurate information. In this paper they have also considered the type of smart devices needed and how to deal with context aware computing on smart phone. In this paper much importance has been given to the campus spatial information service as an essential part of the digital campus where the Geographical information system(GIS) plays a major role. This system adopts the prevalence of B/S model. The system also makes full use of free data and it uses open-source development tools and function of components which eventually reduces cost and difficulty in the system development. This paper gives major weightage to the location based tracking services. Various location tracking techniques can be used with the help of networks such as GSM(Global system for Mobile Communication),GPRS(General Packet Radio Service) and CDMA(Code division multiple access).

In [2] vaibhav anpat ,ashutosh shewale, yogesh bhangle “Developed an application named is Campus Map for campus environment”. which is useful for students ,people for entire campus. In that they provided home

page in that we select a destination location with current location after that one path is drawn on map. Google map (GPS) allows us to find destination along with their current location.

In [3] "Campus assistant application on a android platform". Mihaela Cardei, Iana Zankina, Ionut Cardei and Daniel Raviv. The campus assistant application offers directions and walking/driving navigation one's android smartphone. It calculates the shortest path from the source to the destination. They have implemented the app in JAVA using android SDK. For this project they have used the Eclipse IDE and utilized the ADT plugin to edit files and manage the project. The Eclipse environment has excellent integration with the android platform and allows users to debug apps running directly on the phone. An important step in their application is parsing the XML map file to create the map graph data structures. A parser basically reads the XML document identifies the tags and extracts the data between the tags. This allows a computer program to access and use the data from the XML file. They have used Document Object Model(DOM) to perform parsing. They have computed the shortest path between source and destination using Dijkstra's algorithm. The algorithm stores the vertices to which the shortest path has not been computed yet in a minimum-priority queue. At each step, one vertex with the minimum weight is removed and its shortest path calculation is completed. Since they were interested to compute the shortest path to a single destination vertex in order to reduce the run-time complexity, they kept only the next step candidate vertices in the minimum priority queue.

If user will select the canteen the map will also provide the canteen route this application will show us a live event which organized in that campus. There is the back button when user click on that it will goes home pages.

In that they use android SDK and android developer tools (ADT) plugin for a eclipse provides a professional grade development environment for building android application.

III.PROBLEM DEFINITION

There are many colleges organizing various events but student/people not getting information about it. Many a times students are unaware of the events going around them and are unable to explore themselves. Moreover there does not exist an efficient system to inform about any event which will happen in just few minutes or few hours later in University college campus with its proper location and shortest path from that current location. So we are providing some innovative way to expand relation between college and new peoples and student and it is also a new facility for any student to show his talent.

IV.PROPOSED SYSTEM

The proposed University campus event navigation guidance and updated event information alert system will work on GPS based android mobile. In our proposed system we have one system admin and college admin according to the number of colleges. They can add, edit and delete a particular event or they can even update it through login id and password. The users can access the details regarding a particular event through an android application on his/her smart phone along with the location of the event and the route to reach to that location with they help of GPS. The user can even register through the application and get the real -time updation. These values are computed with the help of peaks of image histograms.

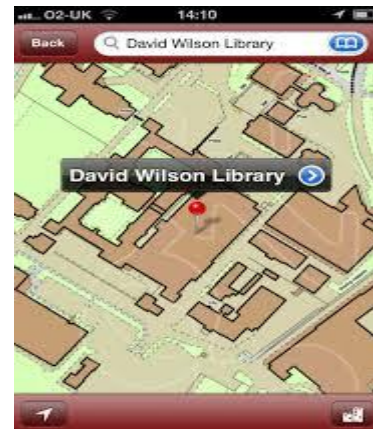


Fig. campus map

There is search option on menu bar for search desire destination location along with current location. In image it also show location with particular label above image shows the David Wilson Library it marks with red colour.

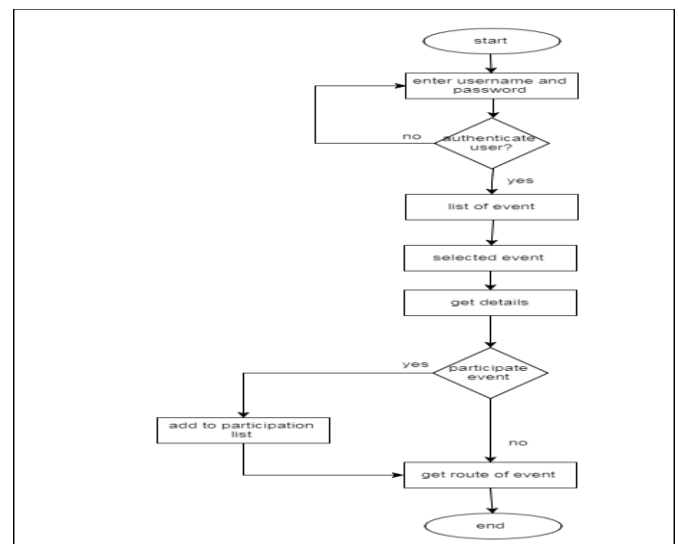


fig: flow chart

This is the page to update event or location this is the page of Jadavpur University Campus Map. This is one form in which administrator can update new event or location of that event.

V.IMPLEMENTATION OF THE SYSTEM

The Software package which used in this system as follows:

- Android Phone (min 1GB RAM)
- Computer
- 2GB RAM
- Hard Disk 20GB

The Software package which used in this system as follows:

- Jdk 1.8.0
- Xampp (php , my sql)
- Android studio IDE with android SDK v2
- Google MAP API v2

University Campus Event Navigation System this project is created to developed application using Android studio IDE with android SDK v2 Google play services installed by using Android SDK studio.

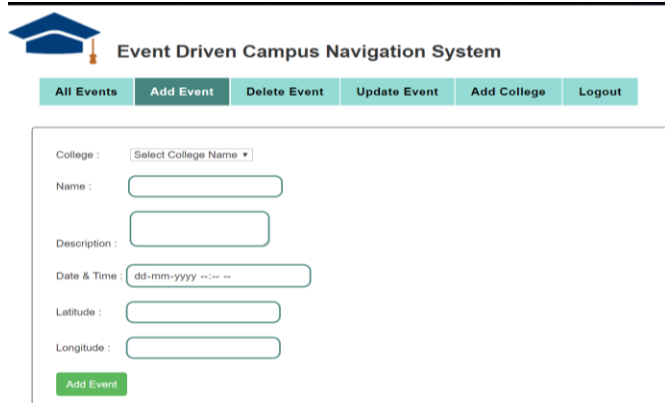
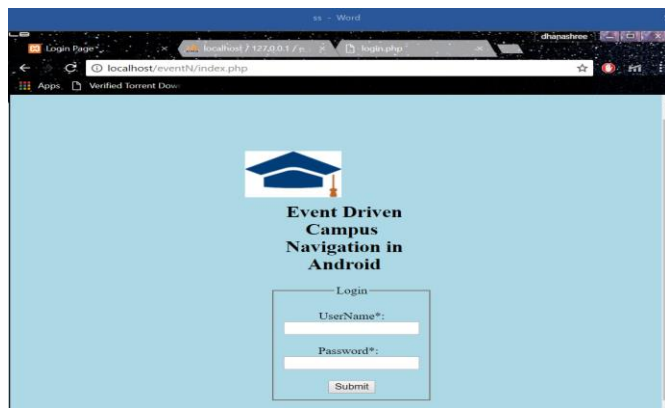


Fig .Administrative page to update location

VI.CONCLUSION

In this paper we have discuss about event based campus navigation system in detail along with images and diagrams. In recent year with help of Google navigation to search location it becomes very easy when we do not aware about that particular destination location.

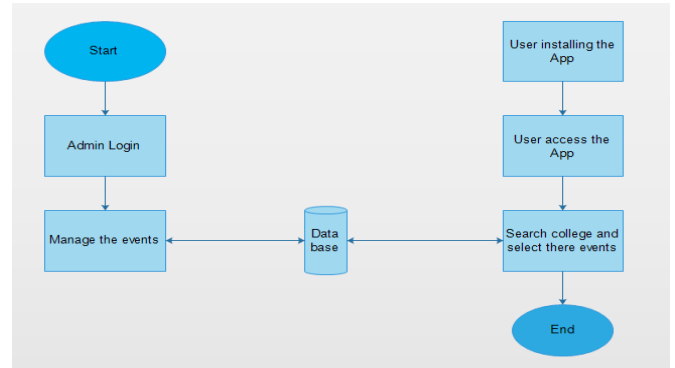


Fig. Flow Diagram of System

This is the small and simple flow diagram of campus navigation system that will shows when admin install and start the app then admin is login to the system and his manage all events like add, delete, update. It will store to the our system database i.e. SQL database. When user installing app on user side it will access all feature or function of app the user will search for events and also destination location of where the particular event is organized and user also register to that event in the app. The objectives of the project is helps the new comers to find the desired place and path from the current location inside the organization.

It helps the new peoples to get the updates of events with its location.

Participant list directly get the admin avoid corruption and fake details provide by coordinators.

Limitations in Existing System:-

1. Each application can be developed for one college only.
2. If there is change in of college location we have to update in new version of application.
3. Admin cannot update the real time changes in application.
4. User has to wait for new version when there is any change in application.
5. User will not receive any update regarding event in college.

VII.FUTURE SCOPE

The event based navigation system is very much needed in a dynamic environment where many things are not under human control. This system caters need of various

stakeholders involved in the process and really makes it easy for participants in a particular event also it will let the new user know about the upcoming events. This application can be used for publicity of a event which was done manually it will save time. In future we can even add some more facilities in this application as we can add the payment method also. This application if developed on a large scale can be used for many publicity purposes.

VIII. REFERENCES

- [1] Sunil bendre, narendra patil, dhananjay kanawade, sagar kanadekar "event based campus navigation system" issn-0975-9646
- [2] Vaibhav anpat, ashitosh shewale, yogesh bhangale "campus navigation on android platform" ISSN online 2349-784x, April 2016
- [3] Mihaela cardei, iana zankina, ionut cardei, and daniel raviv, "campus assistant application on an android platform", proceedings of iee southeast on, pp 1-6, Jacksonville, Florida, April 04-07, 2013. Fl 33431, USA
- [4] Prof. K. D. Tamhane, Mr. Sagar R.Tribhuvan, mr. Akashy.P.Bhurke, mr. Sachin B.Take "mobile learning application" ISSN 2250-3153, march 2015
- [5] Shir Ni Ler and Wan Mohd Nazmee Wan Zainon* School of Computer Sciences, Universiti Sains Malaysia, "Campus Mobile Navigation System Based on Shortest-Path Algorithm and Users Collaborations" 11800 USM, Penang, Malaysia noblesn@live.com, nazmee@cs.usm.my P. S. Bangare , P. N. Gandhi, S. B. Diwate, R. S. Gujar , S. L. Bangare" The Campus Navigator: An Android Mobile Application" ISSN 2278-1021,march 2014