

Event Based Campus Navigation System

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Abstract - The college campus area is a large area and it has many more departments and sections. 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 and gives description about it to the user.

Keywords— Android SDK, Google map, Location Based Service, GPS

I. INTRODUCTION

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. Location-based applications are intertwined with augmented real time views are possible. In the context of this work a University Campus navigation application for the University of Colombo 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. This 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. PROBLEM DEFINATION

There are many college organizing event but student/peoples not getting information yet so we are providing some innovative way to expand relation between college and new peoples and student and also new facility to any student can show his talent. The proposed system has one system admin and college admin according to the number of college. They can add, edit and delete a particular event through log in id and password. The users can access the details regarding a particular event through an android application with the location of that event. The user can register for that event through the application and can get real time updation.

1. Registration and Login : User will be using the android application which will be made handy for them. They can register in to this application filling up the registration form and can use the same credentials while login into the application. Login details will be verified from the database and once validated they will be given an option to participate in the system.

2. College Admin - Login : Every college will have their unique id and password to login into the system. They will use the system from the web panel so that access it as per their convenience.

3. System Admin – System admin is the one who got upper hands on complete system and got a permit to create new college admin. Their added college admin can only login into the application.

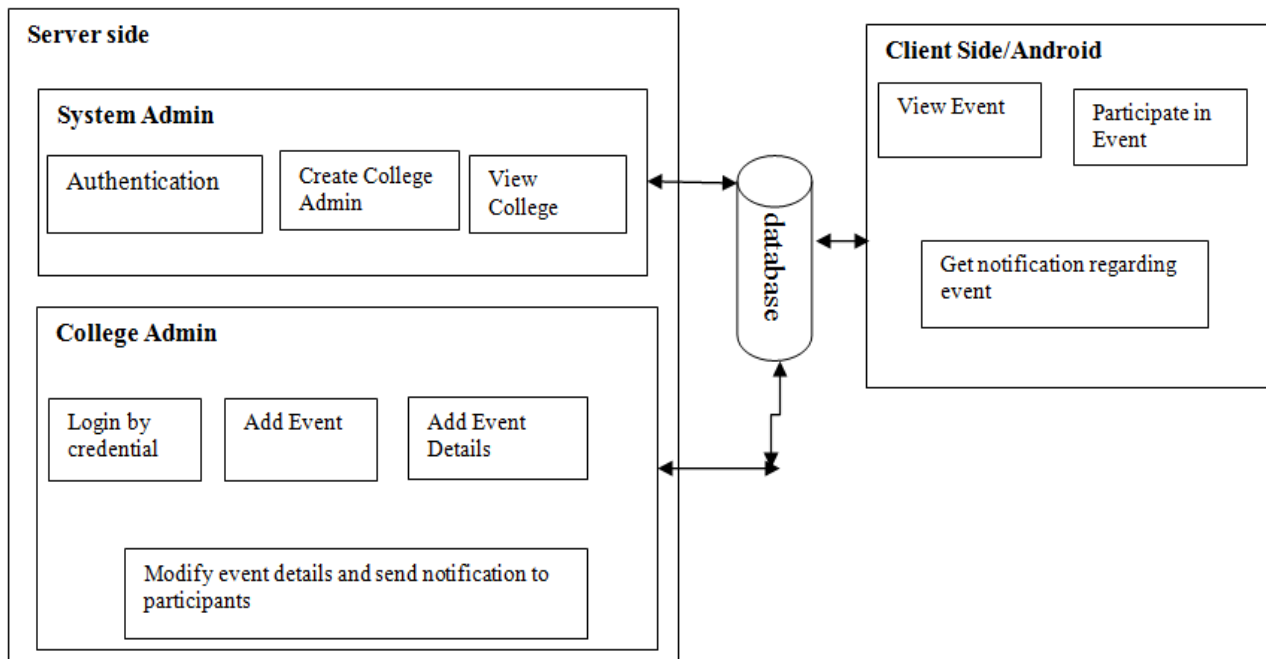
4. College admin – Add event and event details : Each college admin will login into the system and can add event and event details with other description which will be viewable to all students.

5. Event Modification : College admin can modify the event details from their panel. The notification for event modification will be pushed to all registered or participated users for that event.

6. User/ Student Android View : Every student can view all the events of each individual college and can also participate from the application. For participation they need to be registered into the application.

If any event is modified registered users get a notification in the application.

III. ARCHITECTURE DIAGRAM



IV. LITERATURE SURVEY

- i. Campus Assistant Application on an Android Platform by Mihaela Cardei, Iana Zankina, Ionut Cardei, and Daniel Raviv Department of Computer and Electrical Engineering and Computer Science Florida Atlantic University Boca Raton, FL 33431, USA E-mail: {mihaela@cse., izankina@, icardei@cse., ravivd@}fau.edu
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. This paper addresses the problem of navigation by using current advances in the technology to make navigation smooth and accurate. There are number of applications which provide such services of navigating through a campus accurately but none of these applications however implement both driving and walking directions, navigation, considering the user type. So the campus assistant application on an android platform provides many functions for the navigation with accuracy as an important factor.
- ii. The Comprehensive Guiding and Navigation Services on Smart Phones by Hsien-Tang Lin Department of Digital Content and Technology Tahwa University of Science and Technology #1 Tahwa Rd. Chulin Hsinchu, 307 Taiwan rogerlin@tust.edu.tw
This paper majorly focuses upon the guiding and navigation as two common services at certain times. There are applications which provide navigation services but majority of them are outdoor applications

- which cannot guide inside the campus or a large area. So the major focus of this paper also looks into that aspect of navigation where the navigation inside the campus or a large area is also smooth. 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. This paper also considers the type of smart devices needed and how to deal with context aware computing on smart phone.
- iii. Design and Implementation of Campus Spatial Information Service Based on Google Maps Yang Yang The Research Center for East-West Cooperation in China, East China Normal University, 200062 Shanghai, People's Republic of China 51080801042@student.ecnu.edu.cn Jianghua Zheng Oasis Ecology Key Lab of National Education Bureau, Xinjiang University, 830046 Urumqi, People's Republic of China itslbs@126.com Jianhua Xu The Research Center for East-West Cooperation in China, East China Normal University, 200062 Shanghai, People's Republic of China jhxu@geo.ecnu.edu.cn Shouyi Lin The Research Center for East-West Cooperation in China, East China Normal University, 200062 Shanghai, People's Republic of China linshouyi86@163.com
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. It is also important that we break through a traditional information system so that users can be provided with simple yet rich navigation. This campus spatial

information service is specifically designed for students, participants, visitors, teachers, etc so that it becomes easy for them to navigate into the campus. 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. All these user-friendly tools makes the digital campus spatial information service and also has bright application prospect.

- iv. A New Approach for Location based Tracking Shaveta Bhatia¹, Saba Hilal² Research Scholar ,Manav Rachna International University, Faridabad, Haryana, India ² Director, Fausta and Research pvt ltd Faridabad, Haryana, India.

This paper gives major weightage to the location based tracking services. In the modern era location based tracking has gained momentum because of advances in the technology. In this paper localized intelligence algorithm is developed where users can define a particular area. Most of the location based tracking services are new emerging and more and more advances and accuracy have become their strength. Location based tracking systems help to find the exact information regarding particular location. 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). The localized intelligence algorithm is an important algorithm to implement this system. But it also says that much study and analysis needs to be done to realize it.

CONCLUSIONS

The Event based campus navigation system is very much needed in an dynamic environment where many things are not under the human control. This system caters to the need of various stakeholders involved in the process and really makes it easy for participants in a particular event.

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