

Campus Guidance and Security Application

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ABSTRACT

College campus can be vast, confusing, and scary for new student and guests. New student and visitor don't know the internal structure of campus then to use the campus guidance application to provide the internal structure of campus .this applications developed in android platform.

Keyword:- Android Platform, Gps, Kml, Map Editor Tool

I. INTRODUCTION

In our project we are going to develop system that provides interactive navigation. The additional feature have involve over time such as displaying roots such as drivable and walkable path in voice navigation and give you to take run time decision in the term of voice message. In current working of the system is based on the English language which is not understandable for all types of user or visitor of collage in case of rural area visitor it is difficult to interact with system so we are going to develop application that provide additional feature is the Marathi language approach which is more user friendly for rural area visitor, students.

The Google map and GPS system have become indispensable in recent year with vast amount of user Relying on them for direction but their capability not yet been fully applied to campuses and landmarks the Direction within the campuses are not available using Google map application for e.g. JSPM campus in our campus there are many buildings, parking slots, new under developing buildings that no complete direction are provided.

The problem address in this project is on using current advanced technology to provide a mechanism to facilitate user voice navigation in campus our objectives is to design and implement the user friendly system that provide drivable and walkable direction and parking slots. The user has option to select a parking lot

closer to the destination building based on the user type (e.g. New Visitor, staff, student).

The another objectives is to provide the security in college campus in the term of maintain the records of visitor, staff, student. In this system

We compute the shortest path between the source and destination using the Dijkstra's Algorithm. In this project we will going to use Map editor tool HTML 5, JAVA script, jQuery Google Map API version 3 is use to display map titles and various Markus representing campus map concept for parking slot. This web based tool stored on mapping server and can be access from smart phones and PC's using popular web browser like Opera Firefox Internet Explorer and Google chrome. The map editor lets the user edit campus map superimposed on goggle map and save it as an xml file.

We represent map as a graph vertices described map feature (locations, parking lots and intermediary segment ends) and edge described drivable and walkable segments between vertices the map is store as an xml file on mapping server [3].

1. GPS: GPS stands for Global Positioning System. It is satellite based navigation system that can be used to locate positions anywhere on earth. GPS receivers take information transmitted from satellite and uses triangulation calculate user's exact location.

2. Campus Map Tool: Campus map tool is tool used to create map of the campus in XML format. This XML campus map is later used by app to identify the campus map objects, such as buildings, parking lots, walkways, etc.3.KML: KML stands for Keyhole Mark-up Language.

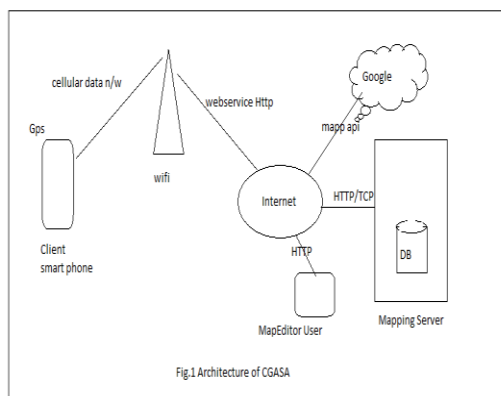
II. EXISTING SYSTEM

In existing system the campus assistant application only shows the direction, walkable path, building, and in existing system only text based approach is used. The current campus guidance application provide the graphical map on campus.

III. PROPOSED SYSTEM

We are going to develop the application provide walking and driving direction and navigation service to user at jspm campus. We also design the campus editors that allows authorized user to add new campus map or update existing once. Currently we are working on adding new feature in our application such as speech direction and voice activated navigation. In this project we are working additional features like security, and Maintaining in-out records of new visitor, student etc. also we are going to add new feature that is language mode like marathi, english as per user.

IV. SYSTEM ARCHITECTURE



In this section present the architecture for campus guidance application in Marathi

language. The user can first select the language mode in Marathi or English and select the source and destination location. The application displays the shortest path from source to destination.

Application provides the voice navigation in Marathi or English language. The users enter the source and destination. This application is important in campuses where different parking slots, buildings, and gardens are assigned to visitors, students, and staff.

Figure 1 presents the architecture of our campus guidance application. The Google map does not provide any information related to campus, so we have to build the map data structure that contains all the campus buildings, roads, parking slots, etc. We design the

Map Editor tools to edit and manage the campus map. New buildings developed in campus can be added to the map editor.

The application gives rerouting if the client deviates from the anticipated way. Figure 1 displays the construction modeling of our grounds collaborator application. Since Google Maps does not give any data on ground areas (e.g. structures, parking garages)

V. ANDROID PLATFORM

The Campus Guidance application offers bearings and driving routes on one's Android cell phone. The steps performed by the application are as follows: • prompts the client for data: the client's location (staff or guest), the starting point and the objective area – generally a building or a parking garage. The current GPS location is used as the source. We executed the application in Java and Android SDK. For this project we used the Eclipse IDE and the ADT plugin to manage files and handle the development. The Android API provides numerous useful bundles that allow clients to take full advantage of the Android platform.

VI. CONCLUSION

. In this Project we will present a “Campus Guidance And Security Application” developed on an Android platform. The application provides walking directions and voice navigation services to users. We also designed a campus editor that allows authorized users to add new campus maps or update existent ones. Currently we are working on adding new features to our application, such as speech directions and voice activated navigation control. In this project we work on additional feature like security(visitor details)

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