

Location Tracking System without Using Internet Based on Android

Komal Chaudhari^{1*}, Apeksha Dhanaskar², Urwashi Kowe³, Prof. Shailesh⁴

Students^{1, 2, 3}, Assistant Professor⁴

Department of Computer Engineering

Cummins College of Engineering for Women, Nagpur, Maharashtra, India

Corresponding Author's Email id: - komalchaudhari385@gmail.com^{1*}

Abstract

In this technique to track the location of any person who is in the rural area or in such a place where the network is not available; in such cases, this android based application helps to find out your location. With the popularity of smartphones increases network traffic, so an offline map is very important. Typically the number of location tracking maps that people use. This makes it difficult in rural area to track the location. Offline location tracking is an emerging trend that locates users even if they are not connected to the network. The work focused on android based technology by modifying GPS for offline location tracking.

Keywords: - Location Tracking System, GPS, Android mobile, MBTILE, Department of Defense (D.O.D).

INTRODUCTION

The GPS, elaborated as Global Positioning System, is a satellite-based navigation system made up of a network of 24 satellites placed into orbit by the U.S. Department of Defense in 1973. GPS was originally intended for military applications, but in the 1980s, the government made the system available for civilians. GPS works in any weather conditions, anywhere in the world, 24

hours a day. There are no subscription fees or setup charges to use GPS [1]. GPS was invented by the U.S. Department of Defense (D.O.D) and Ivan Getting at the cost of twelve billion taxpayer dollars. The Global Positioning System is a satellite navigational system predominantly designed for navigation. GPS is now gaining prominence as a timing tool [2]. Eighteen satellites, six in each of three orbital planes spaced 120°

apart, and their ground stations formed the original GPS. GPS uses these “man-made stars” or satellites as reference points to calculate geographical positions accurate to a matter of meters. In fact, with advanced forms of GPS, you can make measurements to better than a centimeter [3].

GPSs are very quickly becoming a standard in most new automobiles and are even finding their way onto a variety of new cell phones. The mapping devices can come in handy under a variety of circumstances. If we are thinking about purchasing a GPS or a device that has a GPS built-in, here are some of the benefits of having one [3]. A GPS can help us to determine exactly where we are at any given moment. Not only can a GPS give us the name of the street we might be travelling on. But many GPS systems can also give us the exact latitude and longitude of where you are located.

On the other hand, the Android mobile platform is becoming more popular to the users for its multi-dimensional purposes. Thus, this proposed system, namely “GPS-based Location Tracking System via Android Device” uses GPS and any mobile phones having an Android operating

system to track the location of a person whenever necessary.

EXISTING SYSTEM

There are so many GPS location apps available in the market, and many people also use they are compatible devices that are owned worldwide – iPhones, Androids, Blackberries and tablet devices such as the iPad and Motorola. There are apps that can help to find a way easily you can go anywhere using this application but, we cannot enjoy this application in rural area so to solve this problem we proposed a new system. This system is used to find the location without using the internet; that system will send you a notification including the place information details. This will be proved very useful for location tracking application and will also provide security.

LITERATURE REVIEW

In this project, it contains the location tracking system of an Android device using SMS software. LBS is a mobile service that has the capability to provide real-time information based on the users' location. GIS has been the heart of LBS. First, we may send location information to remote parties. This set of service is commonly used today, e.g., in location tracking applications. Second, use

location information to make communication decision, e.g., a user agent may use automatically disabled Instant messaging when driving. Third, location changes can trigger communication actions, e.g., when a person user agent gets a location notifications indicating the person enters a room, the user agent may automatically turn on the light of the room. Sending location information to remote parties for location tracking locations are usually represented in geospatial coordinates or civil addresses for tracking.

Firstly user sends the service request through a mobile installed app. With users, current location information obtained from the GPS data is sent to the service server via the mobile communication network. The service server request stored database and other related databases to get the required information for a user.

PROBLEM DEFINITION

Location Tracking is important in the days' era. Its importance is the security increasing day by day. We can track the vehicle or location using GPS when connected to the internet. But the drawback of the system is it cannot work without the internet so, to overcome the problems of online location tracking, such as no network area or low signal strength. We are

going to propose a system that will track assets for the particular area; also, we can track location from source to destination, or we can get the information of the nearby places.

PROPOSED SYSTEM

1. The user will add mobile no. on the designed Website.
2. Access location online. disable
3. The reminder will be entered by the user and stored in the SQLite database.
4. Location tracking will be performed using the GPS service.
5. Changes in location can be emulated with the help of the KML file in Android.
6. The location change will be compared with the database entries to see if there are no task tracking. Locations are usually represented in associated with the current location.
7. Corresponding task information will be displayed tracking on the mobile screen.
8. The location server will constantly deliver the Location information to the mobile every 3 seconds.
9. Based on this, communication with the Backend server for displaying the corresponding task will be established.

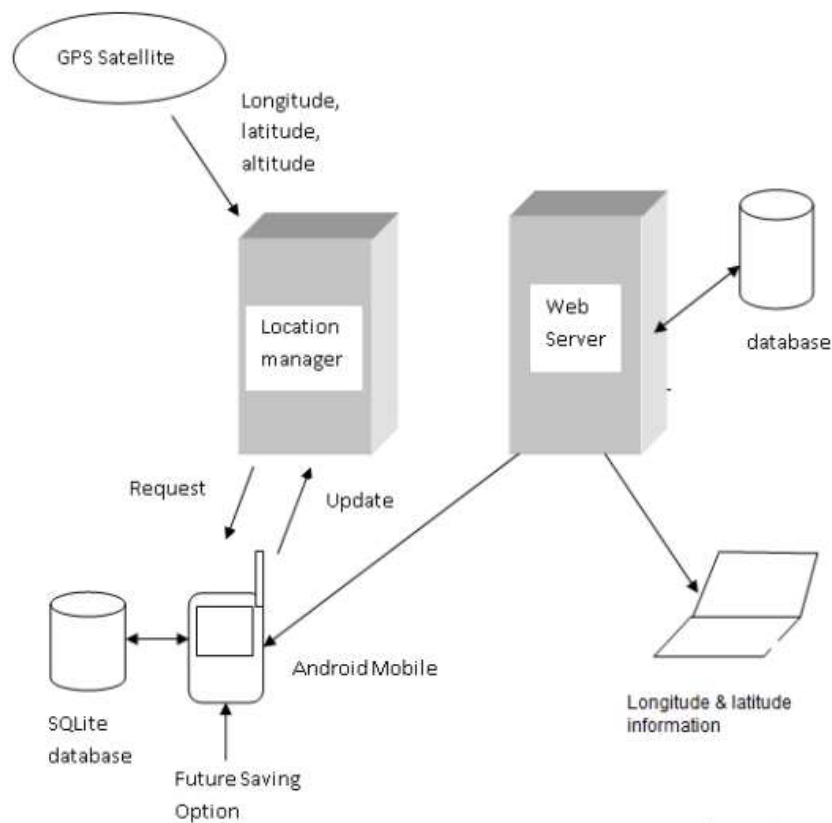


Figure 1

The proposed method can be implemented as follow:

- 1) Install the application and the find user location.
- 2) Generate offline map file: MBTILE FILE and enable GPS.

PROCESSING

- Find the location in MBTILE offline map file.
- Track current location using GPS.
- Calculate latitude and longitude.
- Notify the latitude and longitude in our mobile through text message.

CONCLUSION

In this project, we have developed an Offline location tracking system to track the position of the person. GPS-based tracking using network provider that had been used for location tracking but without using the internet by using KML parsing it is used to show the direction from source to destination.

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