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Android Application Using IPS With User Defined Privacy Preservation

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Abstract: ***Indoor Positioning System (IPS) has played a major part in using navigation inside an enclosed or indoor location. Predominant Smartphone as localization subsystems currently relies on server-side localization processes, allowing the service provider to know the location of a user at all time. In offline mode we navigate inside the Indoor area. Need to choose the source and designation location for navigate inside the area.The pattern for the existence of such group is saved in a large scale database. In online mode we can make use of favourite place, their location and location navigation using Google maps. The consent of the user is questioned each time the user makes contact with the IPS. To enable such indoor applications in an energy-efficient manner and without expensive additional hardware, modern Smartphone's rely on Indoor Positioning Services (IPS).***

Keywords: IPS, Security, Navigation, Offline Navigation

I. INTRODUCTION

People spend 80-90 percent of their time in indoor environments, including shopping malls, libraries, airports or university campuses. The omni present availability of sensor-rich mobiles has boosted the interest for a variety of indoor location-based services, such as, in-building guidance and navigation, inventory management, marketing and elderly support through Ambient and Assisted Living. To enable such indoor applications in energy efficient manner and without expensive additional hardware, modern smartphones rely on cloud-based Indoor Positioning Services (IPS), which provide the accurate location (position) of a user upon request. There are numerous IPS, including Skyhook, Google, Indoors, Wifarer, Navizon, IndoorAtlas, Byte Light and our open in-house anyplace system. These systems rely on geolocation databases (DB) containing wireless, magnetic and light signals, upon which users can localize. Particularly, IPS geolocation DB entries act as reference points for requested localization tasks. A smartphone can determine its location at a coarse granularity (i.e., km or hundreds of meters) up to a fine granularity (i.e., 1-2 meters), by comparing against the reference points, either on the service or on the smartphone itself. One fundamental drawback of IPS is that these receive information about the location of a user while servicing them, generating a variety of location privacy concerns (e.g., surveillance or data for unsolicited advertising).3 These concerns don't exist with the satellite based Global Positioning System (GPS), used in outdoor environments, as GPS performs the localization directly on the phone with no location-sensitive information downloaded from any type of service. Although in this work we are mainly concerned with fine-grained Wi-Fi localization scenarios in indoor spaces, our discussion is equally applicable to other types of indoor fingerprints (e.g., magnetic, light, sound) and outdoor scenarios (e.g., cellular).Location tracking is unethical in many respects and can even be illegal if it is carried out without the explicit consent of a user. It can reveal the stores

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and products of interest in a mall we've visited, doctors we saw at a hospital, book shelves of interest in a library, artifacts observed in a museum and generally anything else that might publicize our preferences, beliefs and habits. Somebody might claim that telecoms and governments are already tracking smartphone users outdoors, on the premise of public and national safety,4 thus there is no need to care about indoor location privacy either. Clearly, there is a lot of controversy on whether this is right or wrong, which has to do with different cultural, religious, legal and socio-economic dimensions. We feel that location tracking by IPS poses a serious imminent privacy threat, which will have a much greater impact than other existing forms of location tracking (i.e., outdoor GPS tracking or Browser-based location tracking).

II. PROBLEM DEFINITION

In Navigation purpose, we are going for two mode online and offline process. In that we have to install two to three apps. We don't have any security for the user because it can be hacked by someone. Here the navigation methodology overcomes the above mentioned problems with single app. When we are going to mall we don't have any information about the stores which are available in that mall. For that we are introducing an application that rectifies the problem by integrating the app in their mobile, So that we can find the route of the stores with the help of navigation.

In the existing system, we can't get the information of stores in the mall with the Offline mode option. It will use more data packets to be transferred for information retrieving. The option to add the favourite place is not available which makes the user unaware of the changes in that particular place. Calling to particular place is not possible since the option is not available. Time complexity is high and system user interface is not much intractable. In the proposed system**,** the pattern for the existence of such group is saved in a large scale database. The consent of the user is questioned each time the user makes contact with the IPS. To enable such indoor applications in an energy-efficient manner and without expensive additional hardware, modern Smartphone's rely on Indoor Positioning Services (IPS).We can use both online and offline mode in this application.

III. OBJECTIVE

We can use both on-line and off-line mode with two different process. In this application indoor map it will show the navigation what the user give. The option to add the favourite's place is available which makes the user aware of the changes in that particular place, which help user to experience the suggestion.

IV. PROJECT DESCRIPTION

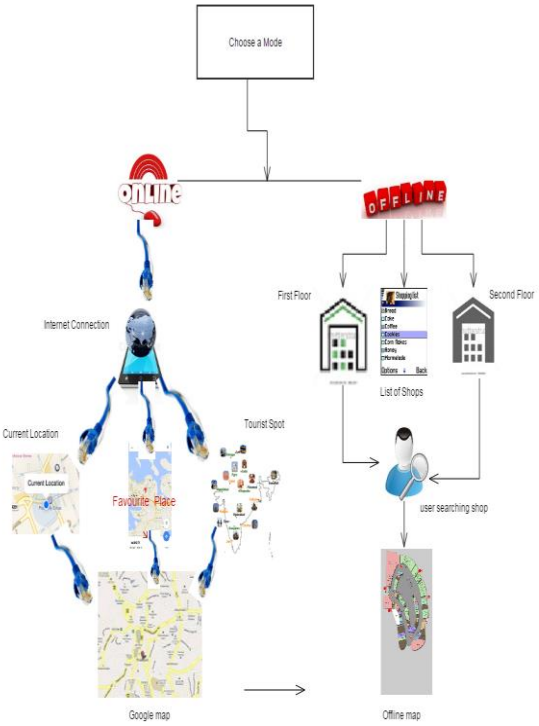

Figure 1

A. ONLINE

CURRENT LOCATION

By using the internet with our optimized data usage, it will invoke the Google map and point with the location where you are. Current location means the place where you are something else is at that moment.

FAVOURITE PLACE

In this modern years all the people will care for having some favourites places around the world, So via our application we provide a realistic feature of implementing this with the place they need to add first they have to make the pointer (map marker) drag to the position where they have to save with the details of name of the place, phone no and address and then it will be saved on our dedicated SQLite database.

TOURIST SPOT

In this list of famous tourist spots will be shown in the app, with that the user will be selecting the place they need and then from online map the data will be fetched and the place will be spotted along with that the user will be provided with the call facility for answering any queries they have.

B. OFFLINE

FIRST FLOOR

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In this module list of shops available in first floor listed in list view.

SECOND FLOOR

In this module list of shops available in Second floor listed in list view.

LIST OF SHOPS

According to needs of the customer/user of this app has an excellent facility to display list of shops that are separated into categories like dress, food, spa, etc.

USER SEARCH

User will be shown with the details of stores that are available at the current floor then he/she has to enter the present shop name then if locate button is pressed the details with navigation map will be show to the user.

OFFLINE MAP

Currently, most maps (not only online maps but also mobile maps on smart phones) focus on outdoor environments, although most of our time, we spent indoors. Additionally, new (high rise) buildings are constructed and their internal structure gets more and more complex, thus it is likely that (especially foreign) people get lost inside such places. In this application indoor map it will show the navigation what the users give.

IV. CONCLUSION

In this project first solution to provide policy-based security containers implemented completely via software. Based on the Gps Method, Navigation between online with Google Map&Offline with TVM will be isolated. To create Security on the smart phones, a different framework has been followed in this proposed system. It mainly concentrates on the Navigation Purpose between the applications running on the smart phones. Navigation purpose is willing to support Route map, Favourite Place & IPS because of the increase in productivity of their User Rating & Downloads. One of the main characteristics of the dynamic switching from online to offline mode. It will provide a solution that could be implemented the navigation with Offline & Online technologies. System configuration files will be analysed in the proposed system.When an unauthenticated action is performed by the user means, the security profile will not be reachable. The user will handle the IPS management details. While performing those operations, It's more useful for user to know about the place in IPS& easy to integrate. We are Successfully Installed both Map in Single Application.

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