

Application for Women Safety

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Abstract: *This project presents an alert system for Women safety detection using common commercially available electronic devices to both detect the problem and alert authorities. We use an Android based smart phone with an integrated features that alert and provide location based information to alert authorities. Data from the application is evaluated with several threshold based AES algorithms and position data to determine a problem.*

Our system provides a realizable, cost effective solution to problem detection using a simple graphical interface while not overwhelming the user with uncomfortable sensors. Problem is very powerful software especially developed for the safety of girls, whenever some body is in trouble they don't have to sit and find contacts or find ways to send short message service, or message the near ones. They might not have so much time.. All that they have to do is shake the smart phone above the threshold value, vigorously. Immediately a message alert is sent to the person's mom, dad and whoever they wish to, if their guardians also have a smart phone. Even though if it is in silent mode. When a message called alert is received it automatically changes its profile to general, and gives a message notification YOUR DAUGHTER IS IN TROUBLE PLZ HELPS.... PLZ HELP.... PLZ HELP.... REPEATEDLY AS A message until they seen and stop it..

Now a day security of women is becoming very poor and the need for this kind of this application is steadily increasing work wise, we will develop a routine schedule based mechanism to monitor the women's security using GPS (Global Positioning System), GPRS (General Packet Radio Service), etc. ...

Keywords: *Smartphone, GPS, GPRS...*

I. Introduction

This application is generally meant for the attention of the authorities or public in the emergency response capabilities such as terrorist attacks and the natural disaster by facilitating the communication We will be tracking the location of the person via GPS and storing the details of the current location into a remote server via GPRS consecutively, we will also be tracking the schedule of the person as per the schedule list which is being uploaded by the person and we will be sending SMS to the relatives of the concerned person about the schedule their current location of the concerned person that time. So that they will come to know about the status and if something is wrong, we will be having another set of oppositions to give a call to a police, social workers, volunteer organizations, etc.

With their respective along the mobile phones. The difficulties in the existing application are the lack of situational awareness and communication terminology among their respective. Due to this response and recovery is Difficult to the authorities. In respect of the public safety with the support of the network provider the application runs in the android phones in efficient way to identify and recover the problem by the natural disaster or terrorist attacks etc... Furthermore users are likely to operate the mobile devices for the security purpose to intimate the problem detection to their respective in the emergency cases.

II. Application Requirements

To develop the application android based mobile application the station and the environment of the surrounding has to been interviewed then the dangerous and the suspicious activates should be notified to the device by the user .if the device detects the problem then only other process creates the attention for reporting to the authority.

1)Time Schedule:

When the apps get installed it traces out the IMEI, SIM, mobile number and stores on the remote server, the daily schedule list gets uploaded by the person from her mobile and get tracked as per the schedule list, if there is any deviation in the schedule they relatives of the person will get an SMS along with the current location and the schedule and Police station members will get a call from the mobile.

2) Tracking:

The GPS will regularly transmit the latitude and longitude of the person and via GPRS we will store the entire transmitted cloud server; if the person is lost we can trace the end location with this kind of approach.

3) Notification:

When the person is in trouble, when she presses an alarm in the application all her relatives, voluntary organization members, police men will get an SMS with her full contact details along with the current location from where the message has been delivered. Using the IMEI number the policemen can track the location where they are travelling.

4) Network provider support:

Network provider has got the important role, by sending the commands through the short message type to the different applications.

5) GPS (Global positioning system)

The GPS, elaborated as Global Positioning System, is a satellite based navigation system made up of a network of 24 satel-lites placed into orbit by the U.S. 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 . 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 traveling on, but many GPS systems can also give us the exact latitude and longitude of where you are located. On the other hand, Android mobile platform is becoming more popular to the users for its multi-dimensional purposes.Tracking System via Android Device” uses GPS and any mo-bile phones having an Android operating system to track the location of a person whenever necessary.

III. System Study

Existing system

The women have to dial a number to call a police or send a Short Messaging Service (SMS) to the particular subscriber code, after they received the service they will get in touch with you later and there is no time to make a call or SMS. There are also so many volunteer organizations all over the world to help them, but they could not able to get those messages.

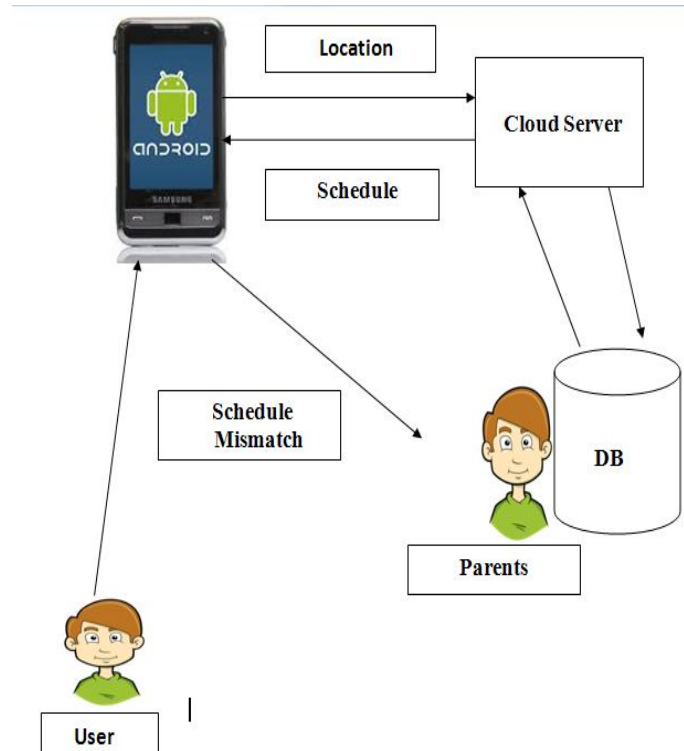
Proposed system

We will be tracking the location of the person via GPS and storing the details of the current location into a remote server via GPRS consecutively, we will also be tracking the schedule of the person as per the schedule list which is being uploaded by the person and we will be sending SMS to the relatives of the concerned person about the schedule their current location of the concerned person that time. So that they will come to know about the status and if something is wrong, we will be having another set of oppositions to give a call to a police, social workers, volunteer organizations, etc.

Features

- This project presents an alert system for Women safety detection.
- The system provides a realizable and efficient.
- The application is used Advanced Encryption Standard (AES) algorithm.
- The application is easier to use all the woman.
- The application is normal budget.

IV. Architecture



V. Operating System

By considering the today's environment most of the people using the android based mobile phones and android is the open source which can be used and adapted easily so android operating system can be used.

Android is an operating system based on the Linux kernel, and designed primarily for touch screen mobile devices such as smart phones and tablet computers. Initially developed by Android, Inc., which Google backed financially. Android was unveiled in 2007 along with the founding of the Open Handset Alliance: a consortium of hardware, software, and telecommunication companies devoted to advancing open standards for mobile devices. The first publicly available Smartphone running Android, the HTC Dream, was released on October 22, 2008

The user interface of Android is based on direct manipulation, using touch inputs that loosely correspond to real-world actions, like swiping, tapping, pinching and reverse pinching to manipulate on-screen objects. Internal hardware such as accelerometers, gyroscopes and proximity sensors are used by some applications to respond to additional user actions, for example adjusting the screen from portrait to landscape depending on how the device is oriented. Android allows users to customize their home screens with shortcuts to applications and widgets, which allow users to display live content, such as emails and weather information, directly on the home screen. Applications can further send notifications to the user to inform them of relevant information, such as new emails and text messages.

Android is open source and Google releases the source code under the Apache License. This open-source code and permissive licensing allows the software to be freely modified and distributed by device manufacturers, wireless carriers and enthusiast developers. In practice, Android devices ship with a combination of open source and proprietary software. Android has a large community of developers writing applications ("apps") that extend the functionality of devices, written primarily in the Java programming language. In October 2012, there were approximately 700,000 apps available for Android, and the estimated number of applications downloaded from Google Play, Android's primary app store, was 25 billion. A developer survey conducted in April–May 2013 found that Android is the most popular platform for developers, used by 71% of the mobile developer population.

Android is the world's most widely used Smartphone platform, overtaking Symbian in the fourth quarter of 2010. Android is popular with technology companies who require a ready-made, low-cost, customizable and lightweight operating system for high tech devices. Despite being primarily designed for phones and tablets, it also has been used in televisions, games consoles, digital cameras and other electronics. Android's open nature has encouraged a large community of developers and enthusiasts to use the open-source

code as a foundation for community-driven projects, which add new features for advanced user or bring Android to devices which were officially released running other operating systems.

As of November 2013, Android's share of the global Smartphone market, led by Samsung products, has reached 81%. The operating system's success has made it a target for patent litigation as part of the so-called "Smartphone" between technology companies. As of May 2013, 48 billion apps have been installed from the Google Play store, and as of September 2013, 1 billion Android devices have been activated.

1. Applications

These are applications written in Java. Some of basic applications include a calendar, email client, SMS program, maps, making phone calls, accessing the Web browser, accessing your contacts list and others.

If you are an average user, this is the layer you will use most, rest all layers are used by Google programmers, developers and hardware manufacturers.

2. Application Framework

This is the skeleton or framework which all android developers has to follow. The developers can access all framework APIs and manage phone's n to keyword ki: basic functions like resource allocation, switching between processes or programs, telephone applications, and keeping track of the phone's physical location. The **architecture** is well designed to simplify the reuse of components. Think of the application framework as a set of basic tools with which a developer can build much more complex tools.

3. Libraries

This layer consists of **Android** libraries written in C, C++, and used by various systems. This library tells the device how to handle different kinds of data and are exposed to Android developers via Android Application framework. Some of these libraries includes media, graphics, 3d, SQLite, web browser library etc. The Android runtime layer which includes set of core java libraries and DVM (Dalvik Virtual Machine) is also located in same layer.

4. Runtime Android

This layer includes set of base libraries that are required for java libraries. Every Android application gets its own instance of Dalvik virtual machine. Dalvik has been written so that a device can run multiple VMs efficiently and it executes files in executable (.Dex) optimized for minimum memory.

5. Kernel – Linux:

This layer includes Android's memory management programs, security settings, power management software and several drivers for hardware, file system access, networking and inter-process-communication. The kernel also acts as an abstraction layer between hardware and the rest of the software stack.

VI. Conclusion

The problem of the women safety is increased rapidly in this environment, so I proposed as an effective Android application to prevent such type of the suspicious or natural disaster, by alerting the concern authorities using the android mobile phone which helps to stop such type of illegal activities and to trace the concern..

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