

# Alert Me App!

## An Android Based Mobile Application To Save Human Life

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**Abstract** — Every person who leaves for work in the morning should expect to return home at night in good health. Can you imagine the knock on the door to tell you your loved one will never be returning home? Or the phone calls to say he's in the hospital and may never walk again? Ensuring that husbands return to their wives, wives to their husbands, parents to their children, and friends to their friends — that is the most important reason to create a safe and healthy work environment. Alert me app is an android based application for human safety. People lose their life in natural calamities, accidents, kidnapping, etc. So, Alert me app will help people who are in critical situation like this by sending location and message to love once, fire station, police station and ambulance and sending information about that place in form of notification. We will create Geofences that will help to make an restricted area. And the database of the co-ordinates of the Geofences will be stored on server. We'll access those data in our mobile. We are trying to work on voice activation.

**Keywords-** Geofences, GPS, LBS, GCM, JSON.JSON

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### I. INTRODUCTION

Due to ecological imbalance occurrences of natural calamities has increased which results into much damage to the life on earth like flood, earth quake, etc. Now-a-days girls are not safe. We see so many news and incidences of rape, kidnapping cases where some girls get disturbed and some girls lose their life. If some accidents occur in the remote areas, there is unavailability of facilities. So many people lose their life because of unavailability of facility on time. Sometimes in deep oceans and seas, fishermen in search of fishes cross the water boundaries and enter another country. Because of this, they get arrested by police of other countries.

This application is aimed to overcome the entire above mentioned problem by including separate modules for each problem and integrate in one system. Safety First App is an android based application for human safety. This app provide following features:

- Providing facility to send his/her GPS location to loved ones, police station, ambulance, and fire stations.
- Informing users by giving notification when they entered in restricted areas or before he/she crosses country boundaries.
- We are likely to provide facility for user to activate our app on voice recognition, this will help user when he/she is not able to activate our app manually.

### II. EASE OF USE

Our project will work on any device which has android operating system in it. Areas where our project will be useful are as follows:

- **People visit new places:** Our app will provide information of that place to user.
- **Fishermen to show the right way:** It will help fishermen when they are likely to cross country boundaries, in the form of notification.
- **Flood tragedy:** It will help people who are stuck into flood tragedy by sending GPS location of that person to their loved once, ambulance and police.
- **Fire tragedy:** It will help people who are stuck into fire tragedy by sending GPS location of that person to their loved once, ambulance, fire station and police.
- **Earthquake tragedy:** It will help people who are stuck into flood tragedy by sending GPS location of that person to their loved once, ambulance and police.
- **Girls' safety:** it will help girls who are stuck into critical situation by sending GPS location to loved once and police.
- **Accidents:** It will help people who are stuck into accidents on highways where no facilities are available, then by using our app he/she can inform ambulance, police and loved once by sending GPS location to them.

### III METHODOLOGY

Methodology is shown throw flowchart diagram as follows:

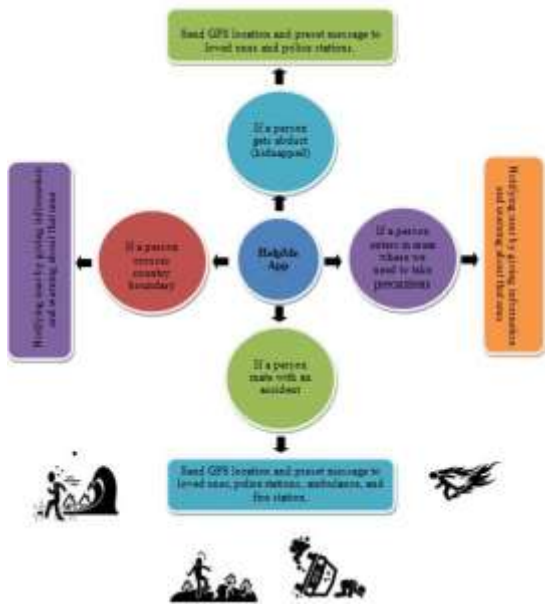


Figure-1: Flow chart of Alert me App

We are working as client-server based application where android device is client and PHP server is server side.

PHP server is server side given as follows:

**Server Side:**

We are creating geofence by storing latitude, longitude and radius of harmful areas. So to store the data of geofences, we created PHP server. PHP server will also store information about the users who are using are application (app). We will work on enter and exit events of geofence. Geo-fencing enables remote monitoring of geographic areas surrounded by a virtual fence (geo-fence), and automatic detections when tracked mobile objects enter or exit these areas. A huge set of LBS (location based services) use geo-fence observation as a key feature. Location plays a basic role in context-aware applications.

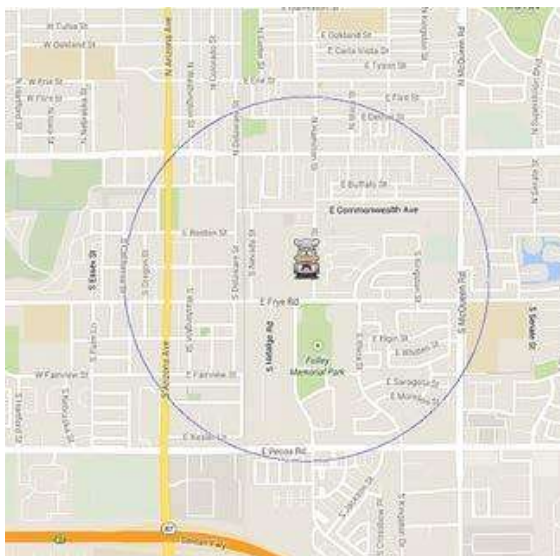


Figure-2: A geofence is defined as a circular area

Geo-fences are user-defined areas defined around a Location. Locations here are cities, towns, other identifiable landmarks as well as vehicle parks of the user organization. Usually, the user

is able to define the bounding of geo-fence area. For example, in simplest case it is just a radius defines some circular area. On practice, in the vehicle tracking system, a vehicle is determined to be at a particular Location if it is within this geo-fence (e.g., within the given radius for circular area).

Any geo-fence implementation requires obviously some form of location monitoring. Technically, this monitoring could be performed either right on the mobile device or via some centralized scheme (e.g., telecom operator observes the location for own subscribers). The main sources for user’s raw coordinates on mobile phones as Global Positioning System (GPS) and Wireless Positioning System (WPS) using cell tower and Wi-Fi access points (AP). Android device is client given as

**CLIENT SIDE:**

Our actual programming is for android mobile which will act as client. Our app will run on android mobile. The data of android mobile will be sent to PHP server and we will fetch data from PHP server to android devices in the form of JSON. JSON (Java Script Object Notation) is an open standard format that uses human-readable text to transmit data objects consisting of attribute-value pairs. It is used primarily to transmit data between a server and web application, as an alternative to XML.

We are sending notification on client device by using GCM. Google Cloud Messaging for Android (GCM) is a service that lets developers send data from servers to their applications on Android devices. This could be a lightweight message telling the Android application that there is new data to be fetched from the server (for instance, a movie uploaded by a friend), or it could be a message containing up to 4kb of payload data (so apps like instant messaging can consume the message directly). The GCM service handles all aspects of queuing of messages and delivery to the target Android application running on the target device.

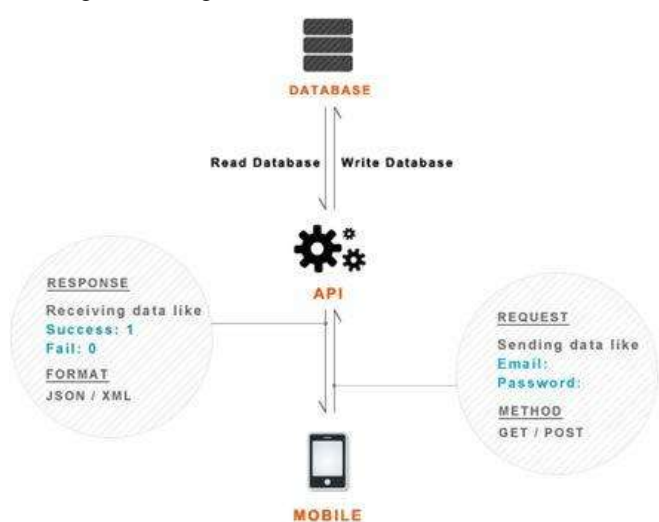


Figure-3: Architecture of the data flow from mobile to Php server

GCM allows 3rd-party application servers to send messages to their Android applications. GCM deployment depends on two things: Application ID and Registration ID. Application ID

assigned to the Android application that is registering to receive messages. The Android application is identified by the package name from the manifest. This ensures that the messages are targeted to the correct Android application.

implementing our project on city level. In future we will implement our project on state level and then country level.

## VI. REFERENCES

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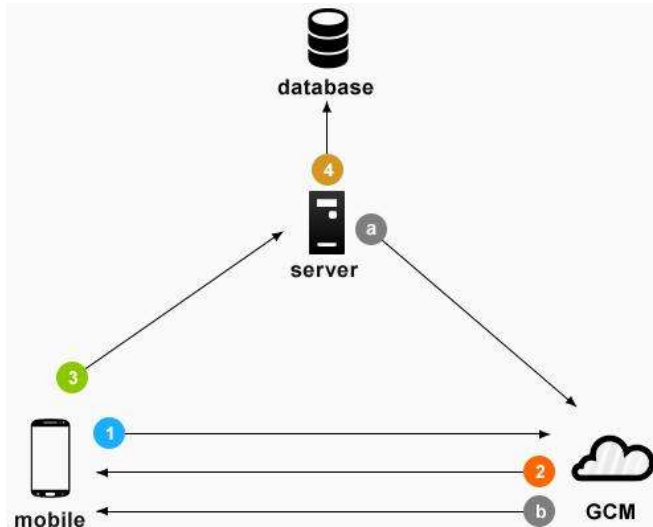


Figure-4: Android- Google Cloud Messaging

Registration ID is unique ID issued by the GCM servers to the Android application that allows it to receive messages. Once the Android application has the registration ID, it sends it to the 3rd-party application server, which uses it to identify each device that has registered to receive messages for a given Android application. In other words, a registration ID is tied to a particular Android application running on a particular device.

## IV. CONCLUSION

Alert me app will help people who are in critical situation like this by sending location and message to love once, fire station, police station and ambulance and sending information about that place in form of notification. Safety is the state of being "safe", the condition of being protected against physical, social, spiritual, financial, political, emotional, occupational, psychological, educational or other types or consequences of failure, damage, error, accidents, harm or any other event which could be considered. Alert me app is an android based application for human safety. People lose their life in natural calamities, accidents, kidnapping, etc. so, our application reduces the unsafe condition and help the people.

## V. FUTURE WORK

Now we have geofence Google API that will create a geofence as circular area. If any part of portion of unrestricted area comes under restricted areas we cannot separate them. So, we will create our own API that will remove this problem which will create geofences of any shape. If any person's mobile gets snapped he will be not able to run our app. So, we will work on voice recognition which will help user to run our app on voice even if someone has snapped his mobile. We are now