GPS ENBLED OFFICE EMPLOYEE TRACKING SYSTEM

T. Anil Karuna Kumar

Associate Professor, Dept. of Master of Computer Applications, Narayana Engineering College, Gudur.

M. Vinuthna

PG Scholar, Dept. of Master of Computer Applications, Narayana Engineering College, Gudur.

Abstract – Our project name is "Office Employee Location Tracking "it is an application which can able to trace the location where the employee is located and show them on maps. The main objective of this application is to locate the persons and trace them on maps so, it is very flexible and it is also user-friendly application. In this app the service application which runs on the background is installed on the person mobile, and at the admin side the monitoring of person and tracking the location on maps will be done. The Broad caste receiver, maps service concepts are implemented.

Keywords – Sending SMS, GPS, Tracking Employee Location.

I. INTRODUCTION

In present days in the entire world mobiles are using very vastly so the people are expecting some new technologies in mobiles as we know android is an open source. In today's world, man struggles to make his life easier. The need for tracking has assumed high importance because of varied and diverse resources, if a product of a company being shipped from the company to consumer, it is in the supply chain management or for that matter even the man-power is required. In large organizational buildings, where the man-power is high, people are not always stay in one place. They have to wander from one place to another to perform their work and for marketing of their product. In such cases, it becomes extremely difficult to keep a track of people and find them when they are needed. Solution for the above problem is as further a tracking system which can track an individual, this process should take place in a hassle free manner and therefore a wireless system would be advantageous.

In the existing application if we want to get the message-if we want to get location if we want to get the maps, for this combination we require different viewer and different location tracker and receiver.In Current System suffers to get individuals location information using mobile number.

In the android market the message receiver and the location tracker and the maps are individually available.But here in our project we are using the combination of all these together "Office Employee Location", it is also another advantage is that it will reduce the expenditure of call. Whether the employee has reached the location or not .it is a GUI presentation it will easily locate the employee on maps.Another advantage is it will locate in satellite as well as street view so, it is a combination of applications finally, we are proposing a new application to reduce the time for the company'sEMS"

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II. BACKGROUND WORK

In previous studies, there lot of work has been done for tracking the employee location tracking in time to time manner.

Common problems faced in employee tracking

- Is the employee actually visiting the customer as reported?
- Is the employee following the daily schedule?
- Is the employee wasting time by staying at one place for a long time?
- Is the travel allowance demanded by the employee correct?
- Is the employee underutilized?
- Is the employee visiting the customer themselves or sending someone else instead?

Consequences of Improper Field Employee GPS Tracking

- If the employee performance is not analysed properly, there will be no chance of improvement.
- The organization cannot identify the poor performers and take corrective measures.
- The organization would be paying for customer visits that might have not actually happened.
- The organization would be spending more than necessary on travel allowances.
- The customers would not be getting proper service, and the company will lose credibility.
- The company would lose market share and profits, which could not be identified until it is too late.

III. PROPOSED WORK

System Model

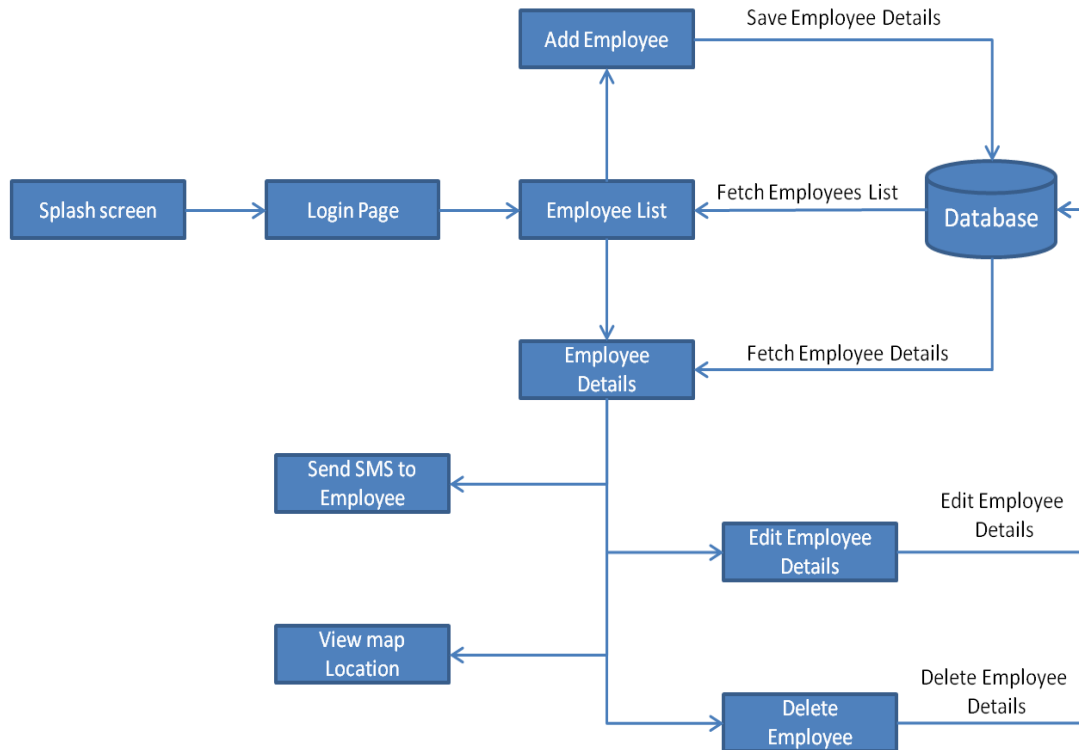The system can be shown in the Figure 1 in which mainly has one entityis user of the mobile.

Figure 1: System Overview

The system has following implementation modules:

Admin Module

In this module provides the admin Android UI to add, edit, delete the person details, send sms to acquire location details, and view the person location information in google map.

Client Module

This module is called client App module.This client App can be installed in client mobiles and this app can receive the admin sms message and decrypt, acquiring location information and send ack message to admin.

SMS Module

- In this module, the system will send the SMS to the recipient using SMS Manager in the Telephony Service.

- In this we have the recipient number and the message to be send. We will first create an object for SMS Manager in the Telephony service, using the method *sendTextMessage* system will sent the message.

- After sent SMS to desired recipient we need to update the message content to view and retry the sent SMS in the user SMS database.

- Here, Users enable the GPS Services and SMS Services in their mobile.

Location Acquiring

In this module client app acquires the client's location information and it can be useful for admin module to locate the client in map using GPS(Global Positioning System).

The implementation process is as follows: The proposed method implements an android application "Office Employee Location Tracking" in which users can manage the Employee contact information.Here, Users enable the GPS Services and SMS Services in their mobile.In this project we provide the communication between Employee and Admin to effectively track the employee location by send simple SMS and get the Location of the employee and find the location on Google Maps.

Features of Our Proposed System

1. Splash screen.
2. login page (username (admin), password(admin)) static login as admin.
3. Once login app in mobile may not be logout without manually clicking logout.
4. Admin can add, view, edit and delete the client details.
5. Admin app sends sms to client app (to find the location).
6. When receive the ack SMS from client app, it stores the location information in the database.
7. on tap of "View emp location" button, it will immediately open the google map and show the client location on map.
8. Client does not restricting the sms.
9. Client app sends ack to admin app which contains location information of the client (longitude, latitude values).
10. Sms should be in the encoded format.

IV. RESULTS AND DISCUSSION

In this system we developed GPS enabled Employee Location Tracking System to improve the productivity of organization and effectively manage their employees. The following screens show that our system is more users friendly and efficient. After installing the application in the admin mobile and by opening it, the loading page screen will be displayed as shown in the below figure.
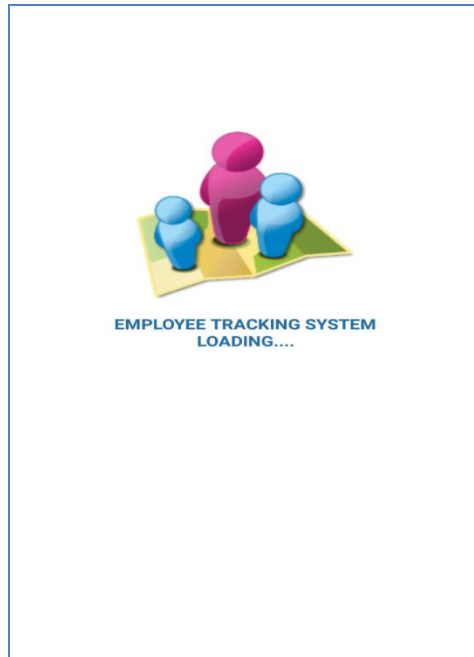
Figure. 2: Loading Page

Later login page screen is displayed, where admin login into the application using username and password.
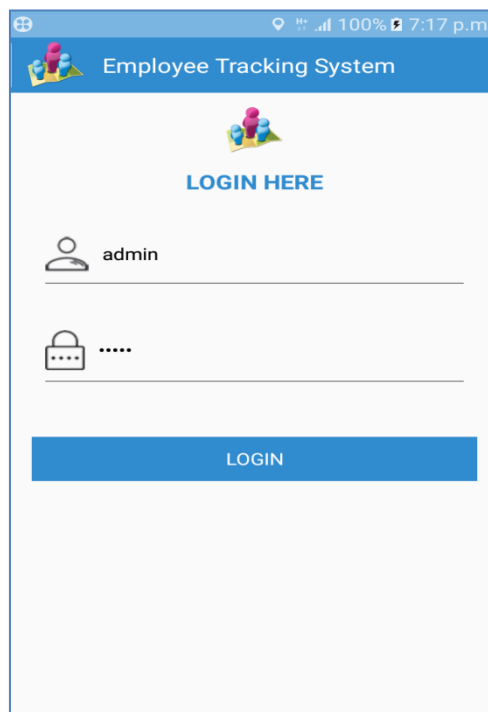

Figure. 3: Login Page

After successfully logged into the account add employee details screen is displayed, where admin can add the employee name and mobile number.
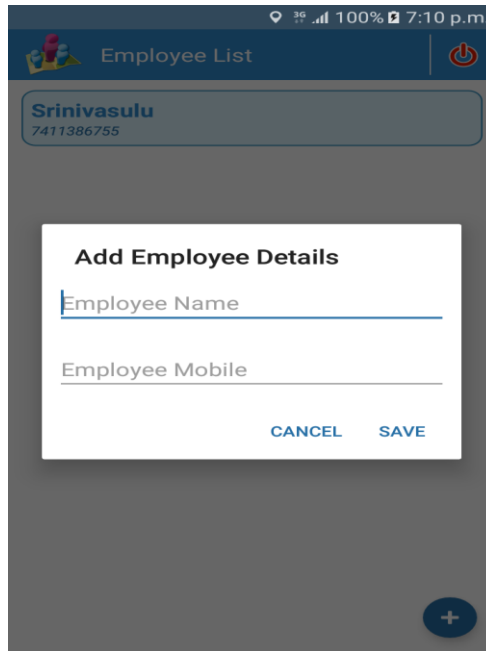

Figure. 4: Add Employee Details

After saving the employee details, admin can view the employee list and select a particular employee to whom the admin wants to send the SMS.
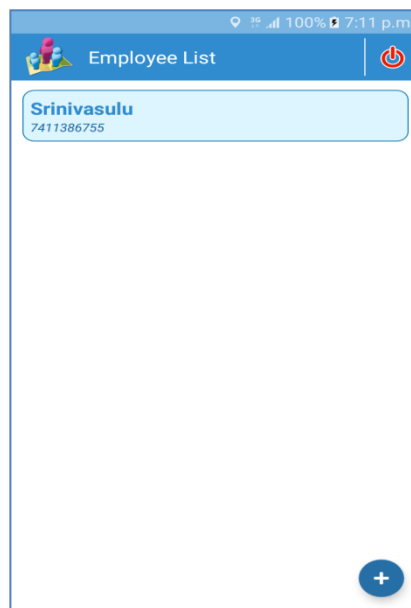

Figure. 5: Employee Details

Then a SMS is sent to the employee in an encrypt format to get the location. The client app installed in employee mobile receives the SMS and it acquires the location and send it to the admin.
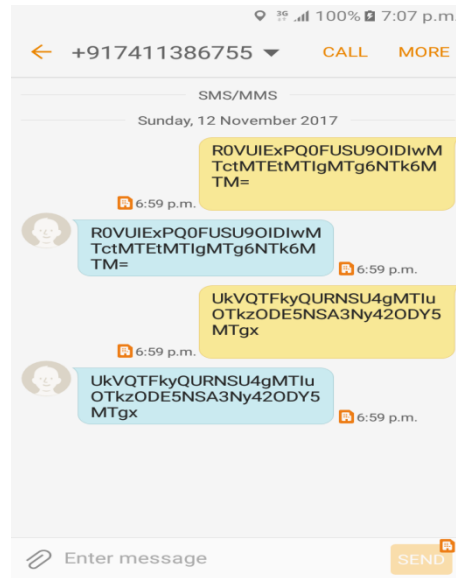

Figure. 6: Message Inbox

After receiving the location from the employee then we click on view map button to view the location through the Google Map.

Figure. 7: Employee Location on Google Map

V. CONCLUSION

This android app fulfils the requirement of the user who needs to track the Employee location information. This android app efficiently and effectively tracking the office employee's location and shows on google map. the limitations of this system are:

1. To view map in the admin app internet in mandatory.
2. To send sms from admin app as well as client app, sms balance is required.
3. Always internet and location / GPS service should be available in the client app.
4. Always background service should be available to fetch the location.

The above limitations of the android application are studied in near future.

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Author's Profile:

T. Anil Karuna Kumar has received his PG degree in *Master of Computer Applications* from *R.V.R & J.C College of Engineering*, affiliated to *Acharya Nagarjuna University, Guntur.* At present he is working as an *Associate Professor* in Narayana Engineering College, Gudur, AndhraPradesh, India.

M. Vinuthna has received her B.Sc degree in *Computer Science* from Sri Swarnandhra Bharathi Degree College, Gudur affiliated to *Vikrama Simhapuri University, Nellore* in 2017 and pursuing PG degree in *Master of Computer Applications* (MCA) from NarayanaEngineering College, Gudur affiliated to *JNTU, Ananthapur,* AndhraPradesh, India.