

Employee Tracking System using Android Smart Phone

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Abstract—Use of Smartphone is increasing day by day and is very effective tools for increasing computational power and security along with search and rescue. The aim of this paper is to track the employee and monitor the employee activity by their office cell phone and improve the growth of the company by securing company data. Employee should be given a android device which works on android Operating system. We will discuss about the design and implementation of admin, employee and customer application as well as about the Centralized server for monitoring employees of the company by separating corporate and personal data. Manager can see the history by logging into centralized server. Manager can also be able to track employee's current location (through GPS). It also analyze the employee behavior by using number of unauthorized activities (good/bad/average). This system is very helpful for the manager in future planning of the company.

Keywords—GPS (Global Positioning System), Android Smart Phone, Tracking.

I. INTRODUCTION

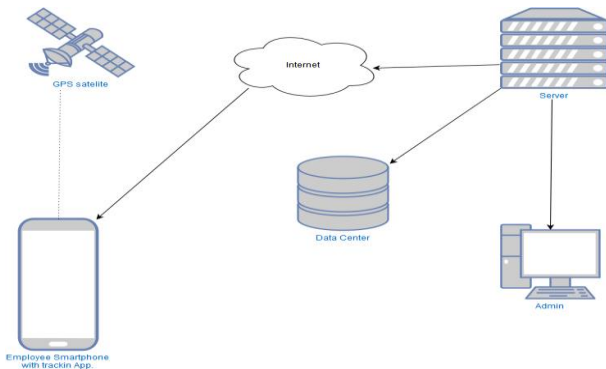
The Employee tracking System use network Technology which is supported by business Organization[4]. Employee tracking and monitoring system is advanced tracking technique in which 3G/4G network is used for communication with the organization[1]. Employee tracking system works on smart phone network. Based on the previous experiences such as inconsistency in the data, loss of data and slow speed of 2G networks, we are implementing a new generation Employee tracking system. This system has the five requirements respectively ability to manage many employee efficiently, tracking of employee easily, Easy to implement and add no. of functions, Very secured and Low cost also. To satisfy the above all requirements, the proposed employee monitoring system adopts 3G/4G communication network function between Android mobile terminals, and collects users information using Global positioning system(GPS)[4]. In this paper we are mentioning the designing and

implementation of android app which is continuously running in background on the android phone of the Employee. The central server is designed to store the database of all the details of the Employee[1]. In addition we are use one new module such as know the employee behavior which dependant on employee data. It analyze the employee behavior by using number of employee activities (good/bad/average)[3]. The proposed employee tracking system consists of web based manager for getting the information about the employee. In this application the terminals which is at employee side is Android mobile and the centralized server which is used to stores employee tracking Information[4].

II. LITERATURE REVIEW

A lot of research is being done in the fields of global positioning system or tracking System. Vivek Tyagi, A. S. Pandya, Ankur Agarwal and Bassam Alhalabi deals with object recognition frame work on mobile phones. The object recognition algorithm used is based on SURF. Self-Configurable New Generation Children Tracking System Based on Mobile Ad Hoc Networks Consisting of Android Mobile Terminals which has Wireless LAN device and Bluetooth device with the adhoc communication function. Arsen Melkonyan, Sireesha Yalamanchili and David Akopian used WLAN system for indoor positioning. Hyun Jung La and Soo Dong Kim are uses service based approaches to developing the Android Mobile Internet Devices(MID's) Applications. Heming Pang, Linying Jiang, Liu Yang, Kun Yuethis based on android smart phone terminal which collect and processing data at server, sending data to smart phone terminal via socket, it reaches the purpose of monitoring the target site anywhere and anytime under the coverage of wireless network and enhances the flexibility of surveillance system greatly.

III. SYSTEM DESIGN



- **GPS satellite:** GPS satellite used in employee tracking system is used to track the employee. Whenever the employee login in his / her account GPS will get start and the location of the employee will be tracked. The admin / manager will track the employee's location and task given to the employee. Due to GPS it will help to locate the nearest employee to the customer, so the customer complaints can be solved quickly.
- **Android smartphone:** Android Smartphone should work on operating system 4.1 or higher. Employees, customer and the manager need to install the application into the Smartphone. Employee, Manager and Customer has separate login.
- **Server/Data center:** Server is used to store the data of the employee. All the details of the employee are stored in the database. The employee tracked is stored in the database. As data is stored it helps the manager to give rewards to the employee based on his / her performance.
- **Admin:** Admin has the overall control over the database. Add, Delete and Update permission are given to the Admin.
- **Internet:** It acts as a middleware between the application and server. To track the employee, internet is essential. Using 3G connectivity or higher can increase the performance of the system.

IV. SYSTEM SPECIFICATION

- **HARDWARE INTERFACE**
 - i. Android Smartphone with 4.2 and above
 - ii. Desktop pc with core 2 processor or higher.
 - iii. Hard disk minimum 128GB.
 - iv. USB cable
- **Software Interfaces**
 - i. Core java 1.5 or higher
 - ii. Eclipse or Android sdk
 - iii. Firebase Database or Mysql
 - iv. Jdbc driver
 - v. Apachetomcat server google chrome 2 or higher for html template.
- **Communications Interfaces:** Internet

V. CONCLUSION

By using this system it is possible for the manager to track an outdoor employee in the organization and it will allow manager to analyze the employee's progress. Manager can also keep the track of the conversation through chat between the employee and the customer. So, all this activity tracked by the manager will help to improve the growth of the organization.

VI. FUTURE SCOPE

In future scope the same system could be tried to implement in different mobile phones like Windows and Apple phones. Also separation of data i.e. personal and corporate data can be applied.

VII. EXPECTED OUTPUT

Through this project It is easy to track the employee's approximate exact location. Can get the data about the employee working for the firm. And can track the activity of the Employee. The overall tracking of employee can be used to reward the employee efficiently. This will result in Company's reputation.

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