



Employee Tracking Using GPS

Lakshita Patel¹, Sukanya Nair¹, Ruchita Gunjal¹, Radhika Suryawanshi¹, Rachana Shinde¹, Mrs. H.A. Shinde²

Student, Department of Computer Engineering All India Shri Shivaji Memorial Society Polytechnic Kennedy Road,
Pune, Maharashtra, India¹

Lecturer, Department of Computer Engineering All India Shri Shivaji Memorial Society Polytechnic Kennedy Road,
Pune, Maharashtra, India²

Abstract: Nowadays tracking employee using a separate GPS device is becoming outdated. In the world of smart phones and any other technologies it is difficult to handle a separate GPS device for tracking the location instead we can use the smartphones for tracking the location of the employee as smartphones already has a built in GPS features installed in it. Our proposed system is going to tracking the employee using GPS which is built in their smart phone device. This can be user friendly and it can be handled easily by the employee. This system is going to track the call history of the employee which is the owner of the device. It tracks the details of Incoming and Outgoing call and SMS detail of the employee.

Keywords: User friendly, tracking of an employee using smartphones, it uses latest technologies and in built features of the smartphones.

1. INTRODUCTION

Near about 5 people has smartphones in the world. Smartphones has many appealing features which attracts many users towards itself and it is very cost efficient. Users are able to install any application which can be useful and helpful to them many e-commerce sites are available that can make our work easy.

There are many organization who feel it very important to track their employees who are working in their organization. So they can be sure that employer can be confident that the employees that are working in their organization don't cheat on them. So to keep a track on the employee's activity throughout the day, week, month or year we can use this system. When the employee is been assigned some work that has to be completed outside their organization when the employee need to visit different places for their work by using the real time record for example if the employee is been asked to visit a place whether he is using the given expenditure for the given purpose or for their personal use. In this paper we are providing solutions to the problems of the employer who need to be sure about their employee. By using the smartphone tracking which will survive for more than 6 hours a day and update will be taken every 5 minutes or less. This paper provides solution to the problems like no need to handle separate GPS device, and provide an update every 5 minutes or less.

2. IMPLEMENTATION

We are implementing some functions for employee monitoring system that allows Managers to monitor their Employee's cell phone. A manager can see all incoming and outgoing calls, text. The Manager can also monitor

where their Employee are using GPS(Global Positioning System), access a history of where they've been throughout their working hours and set up alerts if their employee are going outside of approved geographical zones. Android mobile terminal are connected to WI-FI network for data transfer between two mobile terminals effectively. Tracking can be made without any distortion in the network. Because of WI-FI network data is stored and retrieved at the server at very high speed. This system uses Android based mobile phones for the software to be run. Employee should have an Android based device and the Managers may have a personal computer for maintaining the record of employee. Manager stores all the details of employee's cell phone in the centralized server like the details of incoming call, outgoing calls text and the location update of their employee which can be retrieved later whenever the manager want to see/check/analyse the performance of their employee based on their behaviour. Managers can view these details later by logging into the centralized server. This server can be personal computer or laptop of the Manager.

3. DESIGN OF THE SYSTEM

The proposed system has two important modules admin module and android module. Where admin module is on the manager side which stores the details of all the employees working in an organization whenever the manager want to see the details of the employee who is out of an organization for some work the manager can track the location and other details of the employee.

Android module here is a smartphone with built in GPS functionality in it which will help the manager to track the



location it will check and track the location and other details of the employee. It will track the following:

Call Logs: The frequently called numbers the number he/she calls frequently or receive the call frequently.

SMS Details: The number from which Employee receives the messages more frequently.

Track the Location Using GPS: The manager will track the location of the employee using GPS installed in their smartphones.

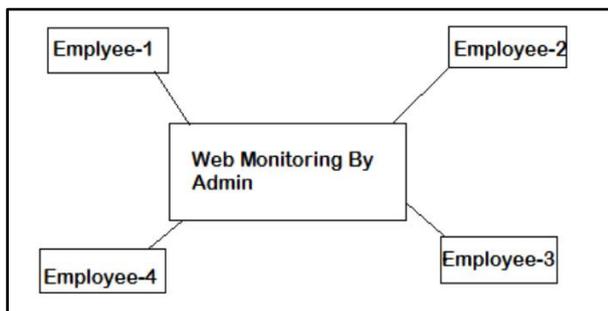


Fig: Basic Block Diagram

4. SYSTEM SPECIFICATION

The various technologies we used in designing the system:

- 1) Java programming language is used for the coding purpose as it platform independent and pure object oriented.
- 2) MY SQL database is use for storing data and to access those data.
- 3) SDK, JDK, Eclipse for implementing the system.

5. CONCLUSION

Hence by implementing this system we are trying to provide an effective way for organization to keep a proper track on their employee with the help of the latest technology so it is also user friendly and can be easily handled by the users. By tracking the employee employer can be very sure about the employee that he/she is not cheating on them and are faithful towards the organization. And doesn't waste their organization's resources in a wrong manner.

In this system it is possible for the employer to track the location of the employee whether he/she is doing their task properly or not and can even keep an eye on the incoming and outgoing calls of employee's device and can keep details about the SMS that is received or send from the device.

ACKNOWLEDGMENT

We are doing this project and implementing this project under the guidance of **Prof. H.A. Shinde**, Professor AISSMS Polytechnic, Pune.

REFERENCES

- [1] Kuntze, Rieke, Diederich, Sethmann, Sohr, Mustafa, Detken "Secure Mobile Business Information Processing "2010 IEEE/IFIP 8th International Conference on, 11-13 Dec. 2010 672- 678
- [2] Heming Pang, Linying Jiang, Liu Yang, Kun Yue, "Research of android smart phone surveillance system"Computer Design and Applications (ICCD), 2010 International Conference on" 25-27 June 2010V2-373 - V2 Atsushi Ito, Yoshiaki Kakuda, Tomoyuki Ohta and Shinji Inoue, "New safety support system for children on school routes using mobile ad hoc networks," IEICE Transactions on Communications, vol.E94-B, no.1, 2011, to appear.
- [3] Hyun Jung La; Soo Dong Kim "A service-based approach to developing Android Mobile Internet Device (MID) applications" Service-Oriented Computing and Applications (SOCA), 2009 IEEE International Conference February 2010
- [4] Melkonyan, Yalamanchili, Akopian, Chen, "Integrity monitoring and thresholding-based WLAN indoor positioning algorithm for mobile devices" System of Systems Engineering (SoSE), 2011 6th International Conference on 27-30 June 2011 191 - 196. [6] Multiple SIMs -- A Framework Based on Software Restructuring Approach" Communications and Mobile Computing (CMC), 2011 Third International Conference Pages: 178 - 181 , June 2011 [7] Yagi, Vivek; Pandya, A.S.; Agarwal, Ankur; Alhalabi, Bassem "Validation of Object Recognition Framework on Android Mobile Platform" High-Assurance Systems Engineering (HASE), 2011 IEEE 13th International Symposium pages: 313 - 316, Nov. 2011
- [5] Mori, Y.; Kojima, H.; Kohno, E.; Inoue, S.; Ohta, T.; Kakuda, Y.; Ito "A Self-Configurable New Generation Children Tracking System Based on Mobile Ad Hoc Networks