

Full Length Article

Resource Monitoring and Behaviour Analysis in Sales and Business Sector

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ABSTRACT: The aim of this paper is to track the employee and monitor the employee activity in company by their office cell phone and improve the growth of the company by securing company data. In this paper, we discuss about the design and implementing admin, employee application and Centralized server for monitoring employees of the company using android by separating corporate and personal data. In this paper we provide different security profile on same Smartphone. In this system we are using dynamic database utility which retrieves data or information from centralized database. We also provide separate mode to employee when he enters company premises. The necessary condition is that Employees should have the Android phone whereas Manager activities are also monitored. This system increases accuracy in managing employees, manager and company data; avoid the unnecessary use of company phones which are provided to the Employee for their office use only and save the time of manager. Manager can monitor their Employees through mobile phones and know the employee behaviour.

Keywords: Smart phone, Android application, GPS, K-Means Algorithm, dynamic database.

1 Introduction

Employee tracking system adopts a smart phone network. Based on the previous experiences such as inconsistency in the data and loss of data, we are implementing a new generation Employee tracking system called as proposed system. This proposed system has the five requirements respectively. For Easy to

implement and add no. of functions, ability to manage many employees efficiently, tracking of employee easily for checking either who is present approved area or unapproved area. Very secured and Low cost also. To satisfy the above all requirements, the proposed employee monitoring system adopts 3G communication

network function between Android mobile terminals, and collects user's information using Global positioning system(GPS). In addition we are use one new module such as know the employee behavioural and also use cloud technique for storing and retrieving related employee details such as incoming call, outgoing calls, and text message. The proposed employee monitoring system consists of telephony manager for getting the information about the employee. In this application, the terminal which is at employee side is Android mobile and the centralized server which is used to stores employee tracking Information. The Collected all information in this system contain the unauthorized use of websites, data uses in MBs, position of employee and time information of android mobile terminals. When the employee crosses the approved area of the company then an immediate alert message will be sent to the manager's mobile phone in the form of text format. By using this system, it is possible for the manager in organization to calculate the behavioural of the employee by using K-means clustering algorithm which can help for improving the organizational growth.

2 Experimental model

Several techniques and methods have been carried out effectively to monitor resource attendance. Lawson et al. proposed a cost-effective computer based embedded attendance management system by which authority electrically monitors the attendance for verification using an improvised electronic card. These cards contain necessary information of an individual. These are inserted in an electronic machine which will record the time and other information to a server system. Password based authentication and verification of attendance monitoring system of any individuals has also been

carried out in the literature. A system that applies user id and password of a person for authentication was designed and implemented by Cheng et al. However, an issue with these electronic cards or password based system allows for imposture since cards or passwords can be shared or someone can ask another person to insert his/her card or password. This problem can be addressed by using biometric recognition system which includes finger print or iris recognition. A system was proposed and implemented by author's fingerprints to identify and calculate the attendance and generate the reports after fixed time duration. Individuals simply put their fingerprints on the fingerprint reader which scans the finger print and verifies that person. M. Smaili et al solved the problem by proposing a wireless attendance management system where iris of an individual is used for authentication.

It is also like fingerprint where no two people can have the same eyes. A scanner will scan the eyes and automatically log the person in. Unlike fingerprint, iris is more preserved from the external environment. But both the fingerprint and iris recognition based approach needs some extra devices or scanner which can be connected to the server computation system.

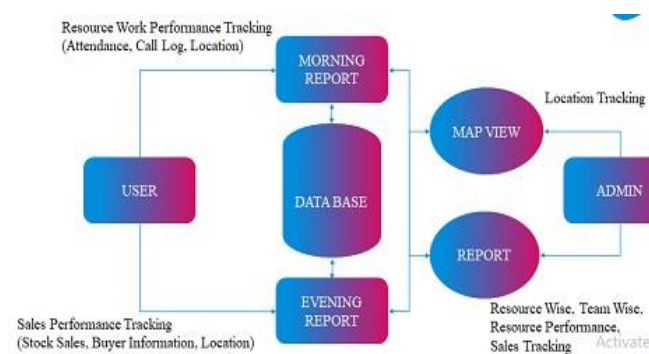
3 Proposed model

The problem which is occurred in the existing that are overcome in proposed system. In this application we are implemented some functionality by using android phone for manager to handling of the company employee to avoid the misuse of their office phone. In our work, we addressed the problem utilizing smartphones internet connectivity for

monitoring the presence or attendance of an individual. Smartphone based monitoring system reduces the surplus cost of additional scanning device because now a day almost each employee possesses a smartphone of his own. An area is fixed for every employee when an employee enters or exits that area, that time stamp is saved and the time duration of any particular employee residing within its area is calculated by the system. In this tracking system also uses one important part such as telephony manager which issued to track presence of each employee, order details and employee behaviour etc. The Android mobile terminal in the hand of employee is connected to high speed 3G network for transferring of effective data between two mobile terminals. So the manager can be Track the employee at a very high speed and because of the high speed network there should be not any interrupt in the network. This proposed system is very secured and reliable as compared to the existing system because of the high speed 3G networks and also provided web service security to this application. The employee tracking system use centralised server for retrieving of the detailed information of the employee phones uses like for the incoming and outgoing calls the centralised server stores its call date, time and duration. For messages stores its date and time etc. So whenever manager wants detailed information about the related employee he will login on to the centralized sever, It very beneficial for the organization in case of business improvement purpose, because if any employee will misuse the company phone it will immediately inform to manager in the form of text and manager will take appropriate action on that

employee. In this system also use GPS tracker for knowing the location of person or things. It consists of minuscule chip which is attached to the object to be tracked. This chip will give out signals which are tracked by the satellite which sends data to the earth giving the exact location of the things or object.

3.1 Overall Block Diagram



4 Conclusion

Using this system we are able to monitor and track the Employees in the company and thus it helps the manager to examine each and every employee from and outside of the company also. The details like SMS history, incoming call list, outgoing call list, web browser history, data usage, and unauthorized call list accessible to the manager using this system. It helps to increase the output of the company thus getting good position in the world. The company's annual growth is increased and the wastage of time is minimized. It helps to track easily employee's log in and out. It helps to see employee details and their activities and also reduces the complexity of employee detail maintenance.

5 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 - V2-376
- [3] 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.
- [4] 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
- [5] 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.
- [6] Atsushi Ito, Yoshiaki Kakuda, Tomoyuki Ohta and Shinji Inoue, 'Smartphone monitoring System' IEICE Transactions on Communications, vol.E94-B, no.1, 2011.
- [7] Manav Singhal and Anupam Shukla, 'Implementation of Location Based Services in Android using GPS and Web Services', International Journal of Computer Science Issues, Vol. 9, Issue 1, No 2, January 2012.
- Amit Kushwaha and Vineet Kushwaha, 'Location Based Services using Android Mobile Operating System', International Journal of Advances in Engineering and Technology, vol. 1, 2011, pp.14-20.