

Automated Payroll System With GPS Tracking

Shweta Kumtole¹, Swarupa Patil², Reena Sidnale³, Varsha Sutar⁴, Ms.S.A.Patil⁵

^{1, 2, 3, 4, 5} Dept of Computer Science and Engineering

^{1, 2, 3, 4, 5} Sharad Institute Of Technology Polytechnic, yadrav, Maharashtra, India

Abstract- The main theme of this paper is track the employee use an android device and calculate payroll for the working hours he worked, from old days there are many methods for evaluating the attendance, for example paper and pen method and the supervisor take the attendance or under the control, the users use to sign with name, but the process had many backlog can be generate next the technology is develop the similar way of tracking attendance and develop lot of example in current days are using biometric devices.

Keywords- automated Payroll, employee.

I. INTRODUCTION

Now a day, monitoring, tracking employees had become a major task for the private and for public institutions and companies. From olden days there are many methods for evaluating the attendance, one of the oldest one is pen and paper system there are many drawbacks and disadvantages mainly eradicating the attendance proxy is the main theme of the project to eradicate the proxy attendance and taking attendance in that way takes more time. Day by day there are many changes in rapid technology as the technology changes the way and systems of taking attendance also gradually changed some of the processes are using RFID sensors, electronic tags, biometric devices like eye scanning, face scanning. All these processes have different issues to eradicate all the issues and disadvantages we introduced software called automated payroll with GPS tracking and image capture. It will track the employee for every 5 minutes the geographical coordinates and help to calculate the payment details.

II. LITERATURE REVIEW

A] Computer based payroll system implementation – In this System, Payroll is a critical operation for every organization to pay employee accurately their salary and emoluments on time. For a big organization, the idea of taking control of employees pay calculations is quite daunting. This system provides multiple user data access. Each user walks through the entire payroll process as per rights allocated from adding new employee to generate pay slips with clear step by step instructions. Administrator will have total web based control to completely customize the payroll system. Head of the department will be able to authenticate new employees, update

existing employees pay, view reports while the operator may calculate pay and can only view reports.

B] Review of Computerized Payroll System- In This System, the process is automated; it would be of great benefit as it would require less time to calculate the salary of the employees. It involves keeping track of hours worked and is capable of keeping a record of employee data including their pay, allowances, deductions and taxes on monthly bases so that fresh definitions are reflected from the month onwards, which leaves all the past data intact Multiple authorized users will be able to login and logout from a web browser. Login checks (username, password) are controlled by administrator HR of the company will be able to authenticate new employees, update existing employees pay, and view reports. The system is user friendly.

C] Employee monitoring system using Android Smart Phone- In this system we are providing dynamic database utility which retrieves data or information from centralized database. The android application in smart phone contains all information about the employee phone uses like their all Employee SMS history, Employee call Logs, Employee Locations, Data uses, Web browser history, and unauthorized data uses details. The main aspect of our paper is Managers to navigate their all company Employees through mobile phones and know the employee behavior (Good-Loyal/Average/Bad).

III. METHODOLOGY

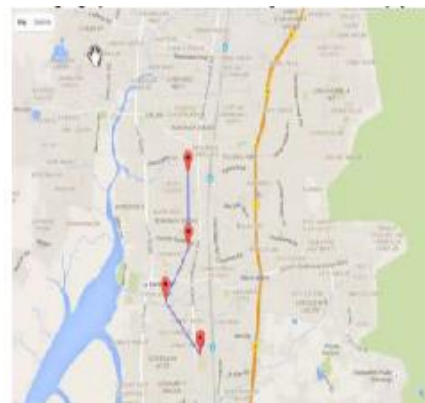


Fig 1 GPS tracking

Employee security and authentication are one among the factors in the current system. Every employee is secured

based on their unique user employee identification number. This unique employee identification number is the number which is given in the office to secure their account. The employee identification number along with other information such as location coordinates; images are also saved in the employee's Android device. Firstly the employee has to install the required APK files on their Android mobile. Login by his/her login credentials and takes an image for security purpose. The GPS mobile location service has to be turned on when the system was running for tracking the location. If mobile location service is off then the process won't go to further process and a SMS is sent to turn on the GPS location. The GPS mobile location service helps to track the employee longitude and latitude positions. When the employee enters the working area, the Android device of the employee it should be referred to through the internet access or any WIFI and a SMS is sent to the server which is present in the office, with the employee identification number and local time of the android device which is referred as login time of that employee. When an employee leaves the working place, a SMS is sent to the office computer with employee id and local time which is referred as logout time and for security purpose, an image is taken to secure the account.



Fig.flowchart to track the employee.

SYSTEM OVERVIEW:

This software automated payroll using GPS tracking and image capture mainly consists of two phases one is application phase and another one is web phase. First one the application part, the APK is installed in the employee's Android mobile and the employee will in by the given credentials i.e. username and password, after logging in the application will track the geographical coordinates and send to the main server for providing more security we are capturing the person's image and sends to the server there in the server image will be verified and the account will be

verified. During the logging of time also, it will track the geographical coordinates and sends to the server and finally for security purpose again an image will be captured and send to the server. While the web inter phase it tracks the employee location coordinates. There are many features like adding and deleting an employee, changing the password of the employee, we can calculate the working days and based on that we can calculate the payroll of the employee.

IV. SUMMERY

This software automated payroll using GPS tracking mainly consists of two phases one is application phase and another one is web phase. First one the application part, the APK is installed in the employee's Android mobile and the employee will in by the given credentials i.e. username and password, after logging in the application will track the geographical coordinates and send to the main server for providing more security we are capturing the person's image and sends to the server there in the server image will be verified and the account will be verified. During the logging of time also, it will track the geographical coordinates and sends to the server and finally for security purpose again an image will be captured and send to the server.

REFERENCES

- [1] Sonal Kasliwal, H.D.Gadade and Sushma Kotkar (2016), Employee Tracking and Monitoring System With Android, International Journal of Innovative Research in Advanced Engineering (IJIRAE) SSN: 2349-2763, No03, Vol 3, pp. 1-4
- [2] Asha P, Albert Mayan J, Canessane A (2018),"Efficient Mining of Positive and Negative Item sets Using K-Means Clustering to Access the Risk of Cancer Patients", Communications in Computer and Information Science ,ICSCS 2018, Kollam, 2018,pp.373-382.
- [3] Aparna Chandran (2013), Smartphone Monitoring System, International Journal of Computer Science & Engineering Technology (IJCSET) ISSN: 2229-3345 Vol. 4 No. 04, page 451-452
- [4] Shermin Sultana1, Ishrat Jahan Mouri and Asma Enayet1 (2015), A Smart, Location Based Time And Attendance Tracking System Using Android Application International Journal Of Computer Science, Engineering And Information Technology (Ijceit), Vol. 5, No.1,
- [5] Usha Nandini , Saravanan M , Albert Mayan J , Murari Devakannan Kamalesh , Mohana Prasad K (2018) , " Automatic traffic control system using PCA based approach",International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS-2017),pp.2387-2392.