Real Time Employee Tracker

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ABSTRACT

In the growing world, the demand for marketing is increasing. Due to this, the marketing employees have to commute from place to place to finish their day's work. At the end of the day, there is no track regarding the work that they have done throughout the day. In order to overcome this problem, our application provides a boon to the companies, so that they can track their employees throughout the day to increase efficiency. Using our smart Android application, the companies can track their users' or employees' check-in/check-out activities based on their current location throughout the day. This application will majorly focus on live tracking using GPS. This application will also facilitate for offline situations such as network failure. The employee meetings can be scheduled based on real-time depending on the position as well as work load. This way the organizations can make sure that their employees finish the given work ok and track them throughout the day.

Keywords : Android Application, Marketing Employees, Track Of Work, Online Tracking, Offline Tracking, Check-In, Check-Out, Web Cache.

I. INTRODUCTION

Our android application will majorly focus on live tracking using GPS. The employees will be tracked by the organization/company throughout the day using their GPS. At the end of the day, all the details about where the employee has been or the places that he visited will be updated in the database. It will also facilitate for offline situations such as network failure. Sometimes, there might be network failure or the employee himself might turn off the GPS for a reason. At times like these, offline tracking will be done. All the data from the time the GPS is turned off till the time it is turned back on, will be stored in the web cache. Then, when the network is turned on, the data from the web cache will be updated in the database. Also, the web cache cannot be cleared/emptied hence preventing the employee to make changes to their location. The employee meetings can be scheduled based on real-time depending on the position as well as work load. The position of the employee and the workload will be considered for assigning new meetings to the employee in real time. This way the organizations can make sure that their employees finish the given work on time and track them throughout the day.

II. SYSTEM ARCHITECTURE
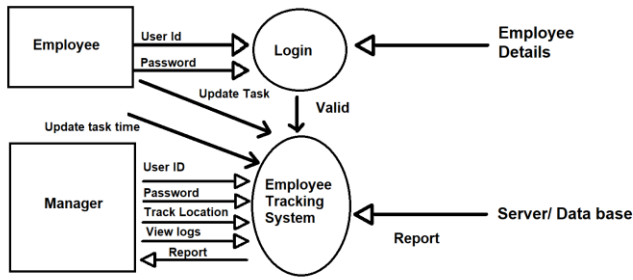
III. OBJECTIVES

Know where the employee exactly is. The exact location of the employee will be known at all times to the organization. Keep a track of work done. There will be proper records of the work done by the employee. Make sure the work timings of the employee are not being used for personal work. Because of live tracking, the organization will be able to make sure that the employee is not doing any oftheir personal work during work hours. Suggest shortest path to the destination. While travelling, the shortest path will be suggested to the employee inroder to save time. Assign next task to an employee, based on nearest location. Based on the nearest location of the next task and the work load of the employee, the tasks will be assigned to the employees in real time.

IV. LITERATURE SURVEY

Here we have discussed the literature review of existing techniques:

Sonal et al (2016), worked on Employee Tracking and Monitoring System.They used android to implement it. In their study the presented various security profile on the same mobile phone. They used dynamic database which retrieves data or information from a centralized database. They provided separate module to employee when he enters company premises. Through mobile phones all information about the employee phone like their SMS history, Incoming calls, Outgoing calls,

Employee Locations, Data usage, Web browser history, and Unauthorized Call History details are tracked. [1]

Priti et al (2015), worked on monitoring employees cell phones using android application.To run the application their system uses android application. The mobile device with the employee and the manager should be in an android phone. Because they are going to send SMS via phone only.

Some alerts are stored in the database, for convenience. This makes it easy [2]

Nirmal, et al, (2016), worked on Employee Surveillance System Using Android Smart Phone. Their system uses Employee monitoring and GPS location Tracking System using Android phone. All the activities of the Employee will be tracked using this system. All the activities of an employee on his/her smartphone and computer, like data usage, all incoming and outgoing calls, web browsing and secured document modification and illegal transfer of company's informative details like blueprints, stocks, projects etc. will be considered. They plan on tracking the employees global geographic position using GPS. Therefore the employees will be strictly monitored during the job hours.[3]

The overall finding of the above discussion is given below as Table-1

Sr. No.	Paper Name	Author	Objectives	Limitations
1.	"An Android based employee trackin	Etuk Enefiok A. and Onwuachu Uzoch	This application makes good use of the recent mobile development technologies and thereby	Firebase data base is full[roof data base but after a

	g system "	ukwu C.	increases the overall performance of the employees, also has a substantial business value because it reduces hardware and maintenance cost and increases customer's satisfaction.	limit it is highly expensive
2.	"Employee Surveillance System Using Android Smart Phone "	M.D. Nirmal , Rohit Koul, Halne Atul, Gagare Tejaswita and Kharde Mayura	This application enables the managers to update the overall performance of the employees in their respective areas. This monitoring system is a revolutionary mobile application which uses Android OS for monitoring time attendance	SQL is limited version of data base in which non uniform data is not suitable. Eg Images
3.	AN OPTIMAL SOLUTION TO TRACK AN EMPLOYEE USING INTREGRATED MODULE	R. Kanmani, Kalicharan , Karthik P , Balasathish , Sandra Cris Mervin	Today there is no special device to track the employee's location and send the location to the cloud safely through IOT.	Cloud technology is not that great to meet up the needs with . GPS features were lagging.

V. TAXONOMY CHART

	BLUETOOTH CONNECTIVITY	MOBILE LOCATION	MOBILE DATA	NEED PHONE	PRIOR KNOWLEDGE OF EMPLOYEE
ONLINE TRACKING USING GPS	✗	✓	✓	✓	✓
OFFLINE TRACKING USING WEB	✗	✗	✗	✓	✓

CACHE					
CHECK-IN/ CHECK-OUT	✗	✓	✓	✓	✓
SUGGEST SHORTEST PATH	✗	✓	✓	✓	✓

VI. CONCLUSION

In order to overcome the problem of not having a track regarding the work that the sales employees have done throughout the day our application will provide a boon to the company so that they can track the employees throughout the day to increase efficiency.

VII.   ACKNOWLEDGEMENT

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