

MOBILE ACTIVITY MONITORING SYSTEM USING ANDROID SPY

Nisarg Salve

*Department of Computer Engineering
Sandip Institute of Technology and Research Centre Nashik,
India
nisargsalve2002@gmail.com*

Amar Potphode

*Department of Computer Engineering
Sandip Institute of Technology and Research Centre Nashik,
India
amarpotphode245@gmail.com*

Aniket Suryawanshi

*Department of Computer Engineering
Sandip Institute of Technology and Research Centre Nashik,
India
anisurya8990@gmail.com*

Sakshi Waghchaure

*Department of Computer Engineering
Sandip Institute of Technology and Research Centre Nashik,
India
sakshiwaghchaure2010@gmail.com*

Prof. Pradeep Patil

*Department of Computer Engineering
Sandip Institute of Technology and Research Centre Nashik,
pradeep.patil@sitrc.org*

Abstract

Now a days Android mobiles are everywhere in the world, but if we consider the area such as IT industry, Organisations, Educational, Business in these sectors all the employee with their Android mobile phones performs much activities. Every company, organisation having their own policies, rules, future projects so in such cases the privacy, security and confidentiality must be maintained by the employee of the organisation. So it's very important to track their mobile phones whether they are leaking the confidential data or they are doing wrong call, wrong SMS, or crossing out the organisation's geographical area in working hours. Another thing there are so many criminal cases happening like child kidnaping so in order to avoid this all cases we need to track the location of child's mobile [10]. After considering all these factors, we implemented the system "Mobile Activity Monitoring System Using Android Spy" This system is implemented for tracking the daily activity of the users with their android mobiles. The information such as missed call, incoming call, outgoing call, call duration, incoming SMS, outgoing SMS along with its date and time will be tracked and updated to the server this server will be monitored by the administrator. This information can be maintained for security purpose of the organization such as leaking the confidential data and maintaining policies of organisation.

I. INTRODUCTION

The system "Mobile Activity Monitoring System Using Android Spy" is implemented in android as Front-End and My SQL in Back-End. Mobile phones are everywhere nowadays. Users are performing more activity with their mobile phones in the organization even in working hour so the system is implemented to track over the users what activity they are performing in working hour in the organization. The information will be tracked such as incoming and outgoing calls will be tracked also the information about incoming and outgoing SMS will be tracked and sent to the server and an alert will be sent to the administrator's mobile device as soon as the activity will be performed by the user through their android mobiles. The tracking will be done base on background services running on the user's android mobile device, the apk file will be installed at the registration time of users. All the necessary information about the user such as User id, User name, User Designation, user department, user mobile number will be maintained by the administrator. Administrator can access the user's location at any point and if the any user crosses the specified geographical area of the organization or banned area of the organization an alert will be sent to the administrator's mobile this will have done by fetching latitude and longitude by the spy working in the user's mobile device.

II. EXISTING SYSTEM

In existing system there is tracking of location can be done of user by using Bluetooth functions i.e. the location will be tracked within a specified range and alert will be send to the administrator's mobile device through Bluetooth. Mobile activity such as missed call, incoming and outgoing call, incoming and outgoing SMS with content is not easily tracked of number of user at a time in existing system.

A. Drawbacks of the Existing System

- More complexity to execute
- Bluetooth has no scope as the Wi-Fi and hotspot concept taking place of it
- It is less efficient
- Installing app on existing system is very hard process
- Through Bluetooth functions we can track one user at one time.
- Security can easily break.

III. PROPOSED SYSTEM

A. Proposed Approach

We proposed the system "Mobile Activity Monitoring System Using Android Spy" tracks the all status of user's mobile such as missed call, incoming call, outgoing call, incoming SMS, outgoing SMS; in addition, the administrator can get alert of what kind of message is transferring and receiving from the device. If any of the employee of organization crosses the specified geographical area instantly an automated alert message will send to the system administrator in the form of E-mail and one message will be send to centralized server for logs and analysis purpose. Administrator can monitor where the employee is exactly whether he is present in his department or other department or whether he is doing chat with other people in working hours? or he is performing some illegal activities such leaking the confidential data? All such monitoring can be done through this proposed system. Fig. 1 represents the graphical presentation of proposed system.

and sent to the Android app. This template includes eight or more digits, with four of them reserved for the user's personal ATM PIN. The others are randomly generated and placed within the template. When the user enters this PIN template, along with their private ATM PIN, into the terminal, an authentication request is sent to the server. The server responds by sending the transaction details to the client, enabling actions like money withdrawal or checking the account balance. Importantly, the transaction ID is promptly marked as "used" in the server, either immediately after the transaction is completed or after a certain period to prevent misuse by potential attackers. This process ensures both security and a smooth user experience in ATM transactions.

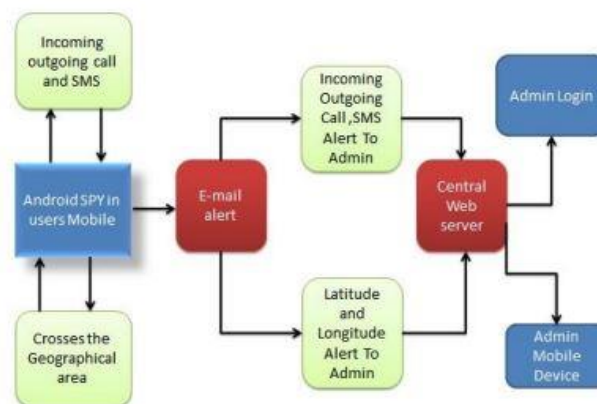


Figure no. 1

IV. SYSTEM PROTOCOL

This system plays an important role to receive an alert from breaches of security of the organization through GPS on their mobile phones with the details of employee. Administrator can easily detect the breaches of security and leaking of the confidential data from one organization to another organization. This system brings awareness in working hours and increases the efficiency in work and provides high level logical security to the industry. This system is not only helpful for organization but also useful for tracking victim with their location, tracking of students performing activity on their android mobile phones in classroom, tracking of kids performing unnecessary activity on their mobile phones by the parents and also can get location alert from their kids, for the government agencies to prevent the data leakage. A. This system focuses on following parameters:

- 1) Easy to use and track devices
- 2) It is Less Expensive
- 3) Number of users can be tracked
- 4) Provides Security to find data leakage and security breaches in the organization
- 5) Provide instant alert to the administrator

To meet the all this parameters "Mobile Activity Monitoring System Using Android Spy" is proposed.

V. CONCLUSION

"Mobile Activity Monitoring System Using Android Spy" is developed for Android mobile phones. The main objective of this model is to monitor the employee or user in case what activity they are performing with their mobile phones for security purpose. All this information will send to the administrator's mobile device as well as on centralized web server through the Android Spy. This system also tracks the location of employee and sends to the manager if they crossed the specified geographical area of the organization. It is very useful system for monitoring user and employee of any organization. It will improve the performance of

organization effectively. It also helps to use working hour effectively. This system helps to maintain the security of any employee base organisation; on the other hand, it helps to track children also in minimum time. It is socially beneficial.

VI. FUTURE SCOPE

Develop a secure, user-friendly mobile activity monitoring system with ethical considerations, focusing on compatibility, customization, and continuous improvement for optimal user experience and legal compliance.

ACKNOWLEDGMENT

- First and foremost, we wish to record our sincere gratitude to the Management of this college and our Respected Principal **Prof. (Dr) M. M. Patil**.
- Our sincere thanks to **Prof. (Dr) Ankita V. Karale**, Head, Department of Computer, Sandip Institute of Technology and Research Centre, Nashik.
- We express our sincere gratitude to our Guide, **Prof. Pradeep Patil** for guiding us in the investigations of this project and in carrying out experimental work.

REFERENCES

- [1] Abhishek Barve & Pragnesh Shah, "Android based Remote Monitoring System", International Journal of Computer Applications, 2012.
- [2] Nitin P. Jagtap, Kanchan A. Patil, Shaziya Sayyed Shakil and Nitin S. Ingle, "Mobile Activity Monitoring System Using Android Spy", International Journal of Advanced Research in Computer and Communication Engineering, Vol. 4, Issue 2, pp.158-162, 2015.
- [3] Adrian Dabrowski, Georg Merzdovnik, Nikolaus Kommenda and Edgar Weippl, "Browser History Stealing with Captive Wi-Fi Portals", IEEE security and privacy workshops, 2016.
- [4] Available in, "Android Version History", 17 Aug 2018 https://en.wikipedia.org/wiki/Android_version_history.
- [5] Jamil Khan and Sara Shahzad, "Android Architecture and Related Security Risks", Asian Journal of Technology & Management Research, Vol. 05, Issue: 02, pp.14-18, 2015.
- [6] Xianhua Shu, Zhenjun Du and Rong Chen, "Research on Mobile Location Service Design Based on Android", IEEE, 2009.
- [7] Kiran Bala, Sumit Sharma, and Gurpreet Kaur, "A Study on Smartphone based Operating System", International Journal of Computer Applications, Vol. 121 – No.1, pp.17-22, 2015.
- [8] Kusum Dalal, Prachi Chaudhary, and Dr. Pawan Dahiya, "Performance Evaluation of TCP and UDP Protocols in VANET Scenarios using NCTUns-6.0 Simulation Tool", International Journal of Computer Applications, Volume 36– No.6, 2011.
- [9] Andrew S. Tanenbaum and David J. Wetherall, "COMPUTER NETWORKS", Pearson Education, 2011.
- [10] Alaa O. Shama, "TCP/IP Protocol Suite (Internet Model)", The Islamic University of Gaza, 2017.
- [11] Ram Sundar G, "A Comparative Study of Mobile Operating Systems", International Journal of Recent Trends in Engineering & Research (IJRTER), Vol. 02, Issue 02, pp. 57-61, 2016.
- [12] Jim Keogh (2002), "J2EE: The Reference" The McGraw Hill Companies.
- [13] Mark Dexter version 1.1 (2008), "Eclipse and Java: Using the Debugger Version Companion Tutorial Guide" Licensed under the Educational Community License.
- [14] Retto Miler, (2009), "Professional Android Application Development " by Wiley Publishing, Inc. Indianapolis, Indiana.
- [15] Vikram (2004), "The Complete Reference My SQL", Tata McGraw Hill Companies, Inc.
- [16] Yuichiro Mori Hideharu KOJIMA, Eitaro KOHNO, Shinji INOUE, Tomoyuki OHTA, "A Self-Configurable New Generation Children Tracking System based on Mobile Ad Hoc Networks Consisting of Android Mobile Terminals" Wadsworth, 1993. 123-135.