Call Log, Message and Camera Monitoring System over Android

Chinar Regundwar, Navnath Rahinj, Priti Rayrikar, Shashikant Bhosale, Navnath D. Kale

Abstract— There are limitations on storage of call and message logs as well as images in mobile phone memory. Android usually keeps a history of the 500 latest calls and any calls older than that are automatically deleted from the phone. We cannot see the records of deleted messages and cannot restore them same in case of images. If your data is corrupted then all of your messages may get lost so there is need of an application that could keep records of all call logs, messages and camera images at storage other than phone here we propose to develop a mobile application for android phones. This application Server will store information for further use. So user can save unlimited call logs, messages telephony activities in phone (E.g. Calls, Messaging & Camera). On occurrence of such activity it will collect information about activity (e.g. caller, call date, time, message content or image) and send it to server. And camera images and can see anytime, from anywhere by login remotely from his mobile.

Keywords— Android, data is corrupted, call logs, Messages, Camera Images, Application Server, telephony activity.

I. INTRODUCTION

The number of smart phones users and mobile applications are growing rapidly. There are several mobile Operating Systems, such as Symbian, iOS, Android, and Windows Mobile. Though smart phones are expected to PC-like functionality, hardware re-sources such as CPU's, memory, and batteries are still limited. To solve this resource problem, some researchers have proposed using server resources in the cloud for smart phones. From this background, Android as a Server Platform is proposed that enables many users to use resources on remote cloud servers. Android is an open source mobile OS initiated by Google. The main reason to use Android as a server platform is that it is able to run not only for smart phones but also for the x86 platform including servers.

Android is a widely anticipated open source operating system For mobile devices that provides a base operating system, an application middleware layer, a Java software development kit (SDK), and a collection of system applications.

Manuscript received on April, 2013.

Chinar Regundwar, Department of Computer Engg., TSSM'S Padmabhushan Vasant Dada Patil Institute of Technology, Bavdhan, Pune-21.Pune, India.

Navnath Rahinj, Department of Computer Engg., TSSM'S Padmabhushan Vasant Dada Patil Institute of Technology, Bavdhan, Pune-21.Pune, India.

Priti Rayrikar, Department of Computer Engg., TSSM'S Padmabhushan Vasant Dada Patil Institute of Technology, Bavdhan, Pune-21.Pune, India.

Shashikant Bhosale, Department of Computer Engg., TSSM'S Padmabhushan Vasant Dada Patil Institute of Technology, Bavdhan, Pune-21.Pune, India.

Navnath D. Kale, Department of Computer Engg., TSSM'S Padmabhushan Vasant Dada Patil Institute of Technology, Bavdhan, Pune-21.Pune, India.

Although the Android SDK has been available since late 2007, the first publicly available Android ready"G1" phone debuted in late October 2008. Since then, Android's growth has been phenomenal: T-Mobile's G1 manufacturer HTC estimates shipment volumes of more than 1 million phones by the end of 2008, and industry insiders expect public adoption to increase steeply in 2009. Many other cell phone providers have either promised or plan to support it in the near future. A large community of developers has organized around Android, and many new products.

In this Android Platform we will be developing mobile application for android phones. This application will monitor the telephony activities over the mobile phone and Server will store information for further use. So user can save nearly unlimited call logs, messages and images. On occurrence of such activity It will collect information about activity (e.g. caller, call date, time, message content or image) and send it to server and can see anytime, from anywhere by login remotely from his mobile.

II. RELATED WORK

There are many researches and work that has been done in the field of Android Mobile Application.

A. Android SDK

The Android software development kit (SDK) includes a comprehensive set of development tools. These include a debugger, libraries, a handset emulator based on QEMU, documentation, sample code, and tutorials. Currently supported development platforms include computers running Linux (any modern desktop Linux distribution), Mac OS X 10.5.8 or later, Windows XP or later. The officially supported integrated development environment (IDE) is Eclipse using the Android Development Tools (ADT) Plug-in, though Intelligent IDEA IDE (all editions) fully supports Android development out of the box, and Net Beans IDE also supports Android.

B. SQLYOG

SQLyog Job Agent (SJA) is a high-performance, multithreaded, multi-platform application that lets you run maintenance scripts with your MySQL databases, have e-mailed formatted result sets of a query, import data and metadata from ODBC-sources, synchronize MySQL databases and tables and do high-performance scheduled backups. On Windows, it is included with SQLyog Enterprise and SQLyog Ultimate. SJA for Linux is free for commercial and personal use.

C. GPRS

General Packet Radio Service, a standard for wireless communications which runs at speeds up to 115 kilobits per second, compared with current GSM (Global System for Mobile Communications) systems' 9.6 kilobits. *GPRS, which* supports a wide range of bandwidths, is an efficient use of limited bandwidth and is particularly suited for

sending and receiving small bursts of data, such as e-mail and Web browsing, as well as large volumes of data. So the GPRS is used in Android mobile to connect constantly to the Server.

D. JSP

JSP is Java server page which has template for a web page That use java code to generate an an HTML document Dynamically .JSPs are run in Server side component which Translate them into equivalent Java Servlets.

E. Servlet

Sevlets are server side components that provide a powerful Mechanism for developing Server side Programs.

III. EXISTING SYSTEM

There are limitations on storage of call and message logs as well as images in mobile phone memory also we cannot see the records of deleted messages and cannot restore them same in case of images. If your data is corrupted then all of your messages may lost so there is need of an application that can keep records of all call logs, messages and camera images at storage another than phone.

IV. PROPOSED SYSTEM

This application will monitor telephony activities in phone (E.g. Calls, Messaging & Camera). On occurrence of such activity, it will collect information about activity (e.g. caller, call date, time, message content or image) and send it to server. Server will store information for further use. So user can save Unlimited call logs, messages and camera images and can see anytime, from anywhere by login remotely from his mobile.

The functions of the system are:

1. **Call Monitoring/Retrieving:** Any call log such as incoming calls, dialled calls or missed calls will be directly updated to the Database. And could be retrieved anytime anywhere on any mobile or PC with the Login Id and Password and can be downloaded or traversed according to the date.
2. **Message Monitoring/Retrieving:** Any Messages that would come will be directly updated to the Database. And could be retrieved anytime anywhere on any mobile or PC with the Login Id and Password and can be downloaded or traversed according to the date**.**
3. **Image Monitoring/Retrieving:** Any Images captured through the camera of the mobile will be directly updated to the Database. And could be retrieved anytime anywhere on any mobile or PC with the Login Id and Password and can be downloaded or traversed according to the date.

Use-Case Model Survey

This subsection includes the actors and use cases that are present as shown in following fig.

Use Case Diagram:

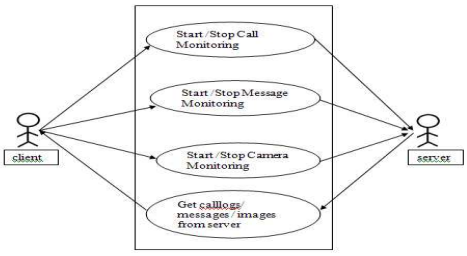

Fig. 1 Usecase of Call log ,Msg,Camera Monitoring System [1].

a) Start /Stop Call Monitoring: This module would used for Starting or Stopping Call monitoring in the background.

b) Start /Stop Message Monitoring: This module would used for Starting or Stopping Call monitoring in the background.

c) Start /Stop Camera Monitoring: This module would used for Starting or Stopping Call monitoring in the background.

d) Get call logs/ messages / images from server: This module would be used for retrieving the information Stored in the database regarding Call, Messages and Images.

V. ACTORS

A) Client This actor is the Android Phone on which the application is installed.

B) Server This actor manages all the information and provides required information to the Client.

VI. ARCHITECTURE DIAGRAM OF OUR SYSTEM

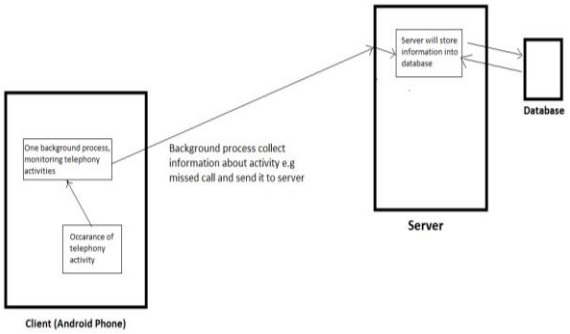

Fig. 2 Architecture of Call log,Msg,Camera Monitoring System [2].

VII. DESCRIPTION

From the above diagram we could clearly see that mainly there are two Nodes Client and Server. The client would be any Android Phone on which the application is being installed. On the client there will be three processes that would be running in the background and would be monitoring for the occurrence of any telephony activity like Call, Message or Image after occurrence of which the process would collect information about the activity e.g. missed call and send it to the server. The server will store the information onto the Database. And whenever we need information server would retrieve it from the database and the send it to the client.

VIII. FEATURES OF PROPOSED SYSTEM

The overview of proposed system is as shown below:

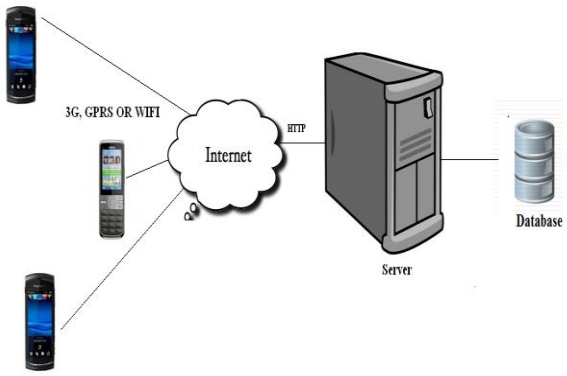

Fig. 3 Overview of Call log ,Msg,Camera Monitoring System [3].

Following are the main features of Call log, messaging and camera monitoring;-

1) This project provides monitoring of telephone activity and camera.
2) It stores nearly unlimited call logs, messages and images.
3) It will collect information about activity (e.g. caller, call date, time, message content or image) and send it to server.
4) And user can retrieve information whenever required

IX. CONCLUSION

Our study helps for constructing an Android mobile application for Android phone which will monitor all telephonic activities over the mobile phone and Server will store information for further use. So user can save nearly unlimited call logs, messages and images.

REFERENCES

[1] en.wikipedia.org/wiki/**Android**_software_development
[2] A.Chervenak, V. Vellanki, and Z.kurmas, Protecting File Systems: A Survey of Backup Techniques. Proceeding Joint NASA and IEEE Mass Storage 1998.
[3] BELL, T. C., CLEARY, J. G., AND WITTEN, I. H. Text Compression. Prentice Hall, Upper Sadle River, NJ, 1990.
[4] SAYOOD, K. Introduction to Data Compression. Academic Press, San Diego, CA, 1996, 2000.
[5] http://developer.android.com/guide/topics/data/backup.htm
[6] http://developer.android.com/guide/topics/providers/content providers.html
[7] http://en.wikipedia.org/wiki/ZIP_%28file_format%29.
[8] Professional Android 4 Application Development –Reto Meier
[9] PROF. R. C. Dharmik, Sangharsha B. Lanjewar, New Approach For Time Efficent Backup and Restore on on-line Server using Android Platform-IOSR Journal of Engineering Mar. 2012, Vol. 2(3) pp: 433-436