

The Remote Data Management Using Android Application

Payal I. Acharya¹, Sudha A. Shende², Kanchan C. Jadhav³, Prof. Chitra G. Sahu⁴

^{1,2,3,4}CSE, Wainganga College of Engineering & Management, Nagpur, India.

payalacharya00@gmail.com, sudhashende@gmail.com, kanchanjadhav0124@gmail.com, cgsahu1@gmail.com

Abstract—Today, for real time application it is important to monitor system in an efficient way. The proposed system describes an intelligent monitoring system, which is based on Android platform it gives facility to access monitored parameters quickly on mobile devices from any place. This application will provide a generalized solution for the fields which works on remote monitoring. By using a web service the monitored parameters are stored in the remote database. To monitor work at remote site and to maintain the day-to-day updates of work manually is very difficult and tedious task. To solve this problem we have proposed an android based mobile application, in this we update the day-to-day progress of work at remote site in the MIS from anywhere using this application.

Keywords—Android ; Remote Monitoring; MIS.

I. INTRODUCTION

In today's hectic life having mobile application is very essential so as to save time and efforts and to get greater work efficiency. Mobile devices like smart phones, tablets are the recent trends in the society and almost everyone carries smart phone with them. There are many companies which perform work at different geological sites. Currently for monitoring site progress work Company have supervisors, who take care of various site. Current system involves lot of paper work. Updating the progress or site information manually on paper and maintaining those information is a time consuming task also the loss of data is possible. Because of this the company has to wait, to know details of the progress of work at various sites. This process is very much time consuming, tedious and human errors can also be found. To update details of the work in MIS (Management Information System) supervisors need to go to the central office and update the details. If the supervisor has been allotted number of sites to visit in a single day then supervisor could not submit the report to the MIS because of this the company have to face loss of time and thus have to employ more supervisor to manage the work more efficiently. To overcome this problem we have proposed "Remote Data Management System".

It has been developed to improve the efficiency of the work and to reduce the time consumption in delivering of the progress report. This application can easily maintain the progress history and updates the detail of the work made at various site regularly.

II. RELATED WORK

[1] Android based Remote Monitoring System

The automated monitoring (surveillance) systems are wired and larger in size. It mostly uses only PC as a surveillance terminal, which works efficiently but does not give portability. In this application as the mobility provided by the mobile phones and the application supportability given by the android system over 2G and 3G network there are infinite possibilities to expand monitoring system. This project proposed a monitoring scheme prototype based on android smart phone terminal. By collecting and processing data at server, sending data to smart phone terminal using the Web Services, it can reaches the purpose of monitoring system the target site anywhere and anytime under the coverage of wireless network and enhances the flexibility of surveillance system greatly.

[2] A Proposed Android Based Mobile Application to Monitoring Work At Remote Rite

The proposed system is developing an application that monitors the expenditure and work performed at various sites of the construction company. In this application construction company can easily record day-to-day expenditures and progress of various works. This application is useful for only Construction Company. This application provides a generalized solution to monitor the various works at various geological points.

The case analysis demonstrates that through the process of MIS development its structure and functionality reflects the interests and values legitimately at work in the field [3].

III. PROPOSED WORK

The propose system is based on Android platform. This Application Provides an easy and efficient way to monitor

details of work at various sites, and history of various sites are recorded and it can be viewed at any point of time. Using this application day-to-day activities of the remote sites can easily updated to the remote database server. The site supervisor can upload the day-to-day progress of work along with photographs.

It has various features that are listed below

- Σ Time Saving
- Σ Secured Environment
- Σ Reduces human error
- Σ Work efficiency

IV. SYSTEM ARCHITECTURE

It provides indefinable integrity for a system. In its simplest form, architecture is the hierarchical structure of program component, the manner in which these component interact and the structure of data that are used by the component. One of the goals of system design is to derive an architecture representation of a system. This description serves as a framework from which detailed design are conducted. The Overall System Architecture defines, how the data from the Android mobile application reach the remote database server, and how the data it is reflected in MIS (Management Information System) as a Web Application.

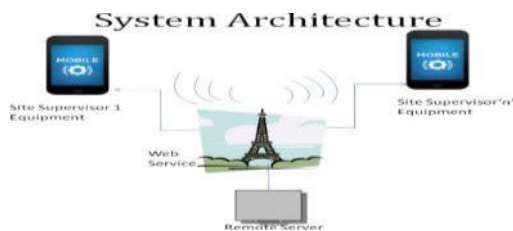


Figure 1: System Architecture I

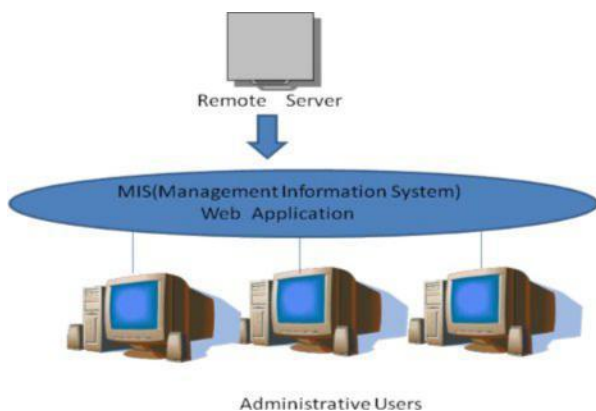


Figure 2: System Architecture II

V. MODULAR DESIGN

The proposed system is divided into five distinct modules which are described as follows:

- 1) *Authenticated User Login*
- 2) *Location based works entry*
- 3) *Calling of Web Service*
- 4) *Works Photo Upload*
- 5) *MIS Report to Monitor the Work Status*

VI. CONCLUSION

This project titled, “The Remote Data Management Using Android Application” is designed to monitor work at remote sites, provides an easy and efficient way to monitor the works performed at various site. This application is useful for different purposes as well as enhancing the feature of existing application. This application is based on android platform it gives facility to access monitored parameters quickly on mobile device from any place. With the proposed application we can improve the time and efforts required to transfer the complete details and thus can enhance the work efficiency and accuracy.

ACKNOWLEDGMENT

We authors are very grateful to our teachers who helped us throughout our project and gave us all the knowledge which we required for preparing our project. They encouraged us to take interest in android development and guided through each and every step. We authors would like to thank for major contribution of ideas: Prof. Chitra G. Sahu (CSE Dept.)

REFERENCES

- [1] “Mobile Phone Based Attendance System”, Shraddha S. Chawhan1, Mangesh P. Girhale2, Gunjan Mankar3, IOSR Journal of Computer Engineering (IOSR-JCE) e-ISSN:2278-0661,p-ISSN:2278-8727Volume 10,Issue 3(Mar-Apr.2013),pp48-50 www.iosrjournals.org.
- [2] “Remote Access of Building Management System on Windows Mobile Devices”- an IEEE paper by OndrejKrejcar,Department of measurement and control,VSB Technical Institute of Ostrava,Cze
- [3] “Android Based Remote Monitoring System”, Abhishek Baeve1,Pragnesh Shah2,International Conference in Recent Trends in ICRITCS-2012.
- [4] “Android Based Mobile Attendance System “,by Freya.J.Vora,Pooja L.Yadhav,Rhea.P.Rai,Nikita.M.Yadav,International Journal of Advance Reasearch in CS And Software Engineering, Volume6,Issue,Feb2016
- [5] “A Context-Aware Middleaware”,Chitra G. Sahu1,Dr.D.S.Adane2,Internation Journal of Advanced Research in Compuer and Communication Engineering vol.issues,May2015