Bio Metric Hostel Attendance Maintenance on Cloud Service

¹ **U.TEJASREE** , ² **P.SUSMITHA** , ³ **S.SANJANA** , ⁴ **S P.BINDU MANASA** , ⁵ **Dr. VAKA MURALI MOHAN**

[1]Student, Malla Reddy College of Engineering for Women
[2]Student, Malla Reddy College of Engineering for Women
[3]Student, Malla Reddy College of Engineering for Women
[4]Student, Malla Reddy College of Engineering for Women
[5]Professor, Malla Reddy College of Engineering for Women

Abstract - **Every Educational institution, be it a college or hostel, maintaining an accurate attendance record of the workforce, faculty, and students is crucial. However, with the traditional paper attendance management culture, it becomes tough to keep track of time taken for routine activities of students in/out. It may affect the overall institutional productivity & restrict it to achieve functional excellence in the long run. In such instances, an online hostel attendance management on Cloud Service system can be helpful. One of the popular used hostel attendance management systems is the biometric attendance system. The biometric system enables institutions to maintain security by tracking student's attendance Through Online with the greatest degree of precision.**

 (Times New Roman, font Size 10, Bold, Line spacing 1.15).

Keywords: Attendance, Access, Cloud Service, Bio Metric, Hostel

I. INTRODUCTION

To develop an accurate, fast and very efficient automatic attendance system using finger print verification technique. We propose a system in which fingerprint verification is done by using extraction of minutiae technique and the system that automates the whole process of taking attendance, Manually which is a laborious and troublesome work and waste a lot of time, with its managing and maintaining the records for a period of time is also a burdensome task. For this purpose we use fingerprint verification system using extraction of minutiae techniques. The experimental result shows that our proposed system is highly efficient in verification of user fingerprint.

1.1 **Bio metric based attendance entry**

Entry and exit of each and every student is monitor by using figure print scanner and face recognition system. Every student fingerprints an face recognitions are stored ino database. When the face and finger print is compared with stored database of the student and if the database is match then the students allowed to entry or exit from hostel. At the time of entry/ exit of student information about entry/ exit is saved into database and sends information is sent to student parents via SMS using GSM module. The system is fully automated system.

The goal of our system is to provide the security to hostel student and develop fully automated management system for hostel and send alert SMS to parent of students about the entry and exit of student form hostel.

The Proposed system is the computerized version of the existing system. It rectifies most of the pitfalls of the existing system and maintains databases of all the entities participating in the system.

Computerization provides easy and quick access over the data. Authorization schemes like giving passwords, encoding data can be used to maintain data security. Also data cannot be lost due to natural disasters.

Finally, complete content and organizational editing before formatting. Please take note of the following items when proofreading spelling and grammar:

1.2 Cloud Based attendance access

The drawback of the traditional system is that it is very difficult to retrieve data from records. It is difficult to handle the whole system manually and it is less accurate and to keep the data in records for future reference because it may get destroyed. Moreover it is very difficult to retrieve data. Redundancy of data may occur and this may lead to the inconsistency. The manual system is so time-consuming. The proposed work store and access with cloud base system is very easy to operate. Speed and accuracy are the main advantages of proposed system. There is no redundancy of data. The data are stored in the computer secondary memories like hard disk, etc. it can be easily receive and used at any time anywhere. The proposed work is easily handled all the data and the work done by the traditional systems..

II. ATTENDANCE AND ACCESS MAINTENANCE SYSTEM

2.1Administrator on Attendance

In administrator manages the master data's like server details and recorded student details. Accept the application of students, view the application forms, reject the fake applications, view the complaints of the students in the hostel, accept the vacating form and delete from the database, edit the notice boards and view complaints all admin on student monitoring done.

2.2 Student Data on Server Access

In the student database, it allows the user to enter the information of all students in a college. There is some functionality provided in the student Data Storage which includes view student records, enter new student records, and update student records. In this work, users will be allowed to set the status of the student to "Withdrawn", "Undergraduate", and "Postgraduate". It is for the purpose to identify whether the student is a withdrawn student, undergraduate student, or postgraduate Student. Information of students will not be remove/delete and will be kept into the system as a student history for future references.

2.3 Fingerprint Attendance access

In the fingerprint module, it is used to store the fingerprint of all the student into thesystem for future matching whiles the student entering into the hostel. First of all, students will require to registers their fingerprint into the system while first coming to the hostel after successfully applies as a student in that hostel. Then, every time they entering into the hostel they will need to scan their fingerprint through the hardware provided within a hostel in order to do fingerprint matching with the fingerprint record that had been stored in the system. Attendance will be automatically signed by the system once the student's fingerprint match the fingerprint record in the system. If the fingerprint of the student does not exist in the system while doing matching, system will prompt out message showing "Invalid fingerprint" whereas once the matching successful, system will also prompt out successful message showing "Attendance taken" to let the student know.

2.4 Attendance maintenance on Cloud

In the attendance maintenance, it is used to take the attendance of the student who enters into the hostel. Through online server can be access the student data and maintain on cloud server.

2.5 Report on Student Information

In the report attendance and data on students is used to generate the report regarding to the student attendance record. First of all, every time the students enters into the hostel the student attendance list record for that hostel will be automatically sent to the system and stored. User will only need to generate the report without do much calculation and customization.
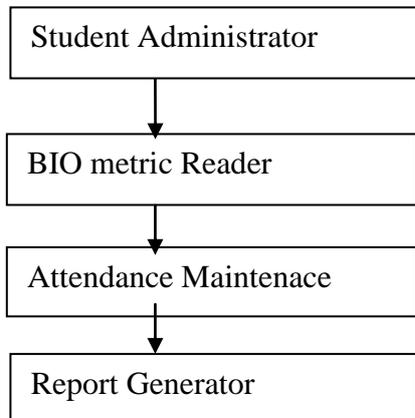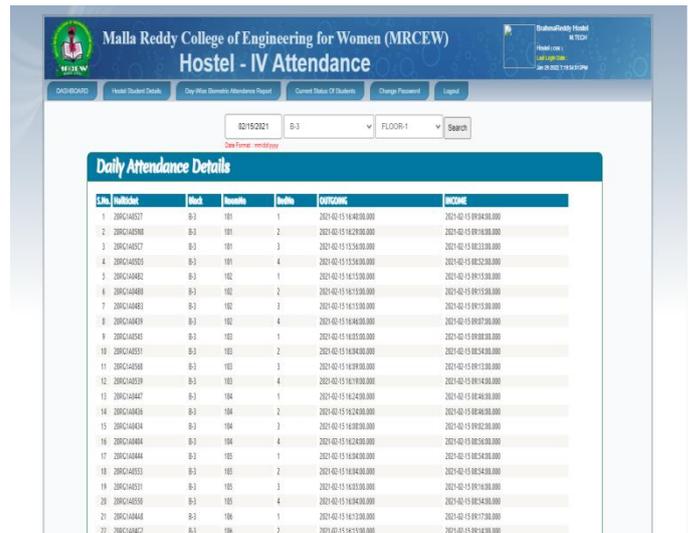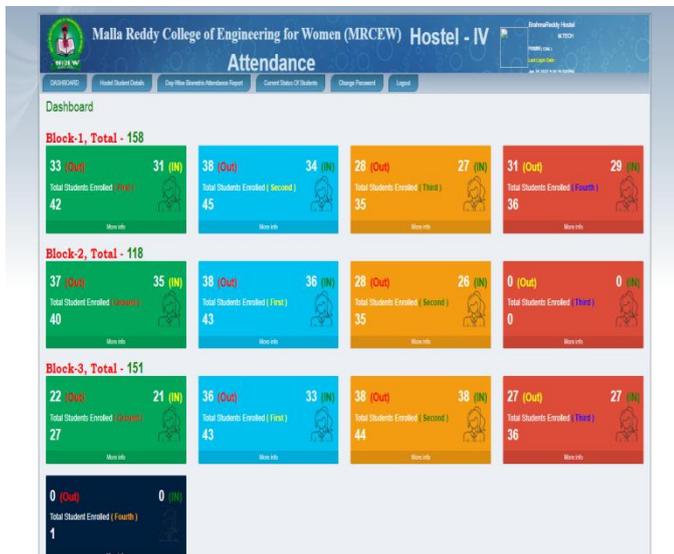
Figure 1: Attendance and Maintenance on Cloud

Figure 1: Hostel attendance Report

III. RESULTS AND DISCUSSIONS

The results of attendance system working on cline mode through cloud server and generate various report on student hostel attendance.

Figure 2: Attendance Dash Bord

IV. CONCLUSION

IN this paper been designed with much care, with the intention easier and the more complexity involved is presented in a simple and lucid style. The Hostel Online Maintenance System includes the student data floor-wise. It shows the current status of students who are currently staying in the hostel, who went out with warden permission for their native places, who does not report after college time with different colors.

REFERENCES

[1] Jamil, T; Dept. of Electro. & Computer Eng., Sultan Qaboos University, Al Khod, Oman, Automatic attendance recording system using mobile telephone, Telecommunications Forum (TELFOR), 2011 19th 1297–1299

[2] 7. Shehu, V. ; Contemporary Sci. & Technol., South East Eur. University, Tetovo, Macedonia ; Dika A. , Using real time computer vision algorithms in automatic attendance management systems, Information Technology Interfaces (ITI), 2010 32nd International Conference on 397 – 402

[3] 8. Saraswat, Chitresh; Kumar, Amit, An Efficient Automatic Attendance System using Fingerprint Verification Technique. International Journal on

Computer Science & Engineering. 2010, Vol. 2 Issue 2, p264-269

[4] 9. Mobile Based Attendance Marking System Using Android .. – IJIRST www.ijirst.org/articles/IJIRSTV1I1027.pd

[5] 10. COLLEGE MANAGEMENT SYSTEM Srikant Patnaik1, Khushboo kumari Singh2, Rashmi Ranjan3, Niki Kumari4 https://www.irjet.net/archives/V3/i5/IRJET-3I5136.pdf

[6] 11. N.Sudhakar Reddy, M.V.Sumanth, S.Suresh Babu, "A Counterpart Approach to Attendance and Feedback System using Machine Learning Techniques",Journal of Emerging Technologies and Innovative Research (JETIR), Volume 5, Issue 12, Dec 2018.

[7] 12. Dan Wang, Rong Fu, Zuying Luo, "Classroom Attendance Auto-management Based on Deep Learning",Advances in Social Science, Education and Humanities Research, volume 123,ICESAME 2017.

[8] 13. Akshara Jadhav, Akshay Jadhav, Tushar Ladhe, Krishna Yeolekar, "Automated Attendance System Using Face Recognition", International Research Journal of Engineering and Technology (IRJET), Volume 4, Issue 1, Jan 2017.

[9] 14. B Prabhavathi, V Tanuja, V Madhu Viswanatham and M Rajashekhara Babu, "A smart technique for attendance system to recognize faces through parallelism", IOP Conf. Series: Materials Science and Engineering 263, 2017.

[10] 15. Prajakta Lad, Sonali More, Simran Parkhe, Priyanka Nikam, Dipalee Chaudhari, " Student Attendance System Using Iris Detection", IJARIIE-ISSN(O)-2395-4396, Vol-3 Issue-2 2017.

[11] 16. Samuel Lukas, Aditya Rama Mitra, Ririn Ikana Desanti, Dion Krisnadi, "Student Attendance System in Classroom Using Face Recognition Technique", Conference Paper DOI: 10.1109/ICTC.2016.7763360, Oct 2016.

[12] 17. K.Senthamil Selvi, P.Chitrakala, A.Antony Jenitha, "Face Recognition Based Attendance Marking System", IJCSMC, Vol. 3, Issue. 2, February 2014.

[13] 18. Yohei KAWAGUCHI, Tetsuo SHOJI, Weijane LIN, Koh KAKUSHO, Michihiko MINOH, "Face Recognition-based Lecture Attendance System", Oct 2014.

[14] 19. Shireesha Chintalapati, M.V. Raghunadh, "Automated Attendance Management System Based On Face Recognition Algorithms", IEEE International Conference onComputational Intelligence and Computing Research, 2013.