

# Intelligent Attendance Management System

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**Abstract**---This project is to design and develops a reliable tracking and recording systems based on biometric fingerprint identification used to monitor attendance. Biometric Access Control System also provides the highest level of security available today by eliminative the stolen, transferred and duplicating. It also will eliminate the problems related with manual work associated with paper based and punch card. The systems will be developed with extended GUI by using Microsoft Visual Studio 2010 integrated with Microsoft Fingerprint Reader which stores the login names and passwords in an internal database located in the user's computer. When needed, the device interactively sends the login names and passwords to compatible applications and websites which can be used to perform the login operation automatically. The device could be useful in an office or campus environment.

## I. INTRODUCTION

Intelligent attendance management system is about automatic attendance taken based on three parameter RFID card reader, fingerprint scanner and retinal scanner.

Attendance Management System is a software developed for daily student attendance in schools, collages and institutes. It facilitates to access the attendance information of a particular student in a particular class. The information is sorted by the operators, which will be provided by the teacher for a particular class. This system will also help in evaluating attendance eligibility criteria of a student.

The purpose of developing attendance management system is to computerized the tradition way of taking attendance. Another purpose for developing this software is to generate the report automatically at the end of the session or in the between of the session.

## II. NEED FOR ATTENDANCE MANAGEMENT

Employee absenteeism has a direct impact on the level of service the University provides. High levels of absenteeism leads to poorer quality of service, lost productivity and reduced morale of co-workers. Consistent management of attendance problems can have highly positive effects on the workplace.

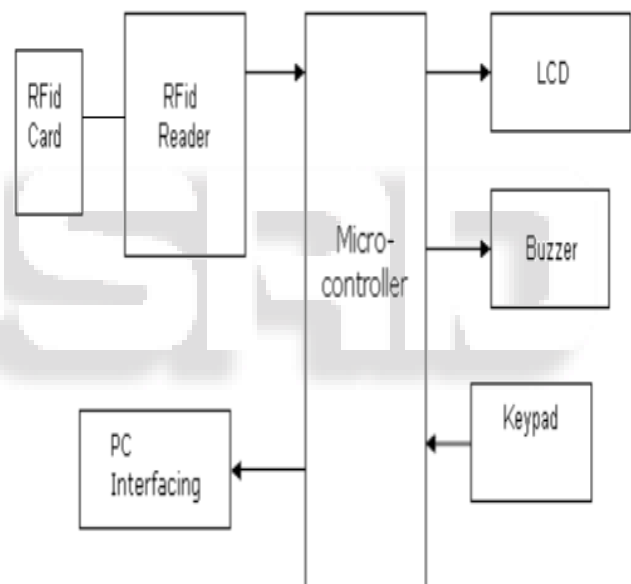
### A. Fingerprint scanner.

Fingerprint reconstruction is one of the most well known and publicized biometrics. Because of their uniqueness and consistency over time, fingerprints have been used for identification over a century, more recently becoming automated due to advancements in computed capabilities. Fingerprint reconstruction is popular because of the inherent ease of acquisition, the numerous sources (e.g. ten fingers) available for collection, and their established use and collections by law enforcement and immigration.

### B. IRIS scanning

Today biometric recognition is a common and reliable way to authenticate the identity of a living person based on physiological or behavioral characteristics. A physiological characteristic is relatively stable physical characteristics, such as fingerprint, iris pattern, facial feature, hand silhouette, etc. This kind of measurement is basically unchanging and unalterable without significant duress. A behavioral characteristic is more a reflection of an individual's psychological makeup as signature, speech pattern, or how one types at a keyboard. The degree of intra-personal variation in a physical characteristic is smaller than a behavioral characteristic.

## III. BLOCK DIAGRAM



## IV. LIST OF COMPONENTS

This project is work on main three device

- 1) RFID card reader
- 2) Fingerprint scanner
- 3) Iris scanner OR Retina scanner

## V. CONCLUSION

Biometric technology has great potential There are many biometric products around, regarding the different biometric technologies Shortcomings of biometric systems due to

- manufacturers ignorance of security concerns
- lack of quality control
- standardisation problems

Biometric technology is very promising Manufacturers have to take security concerns serious

REFERENCES

- [1] Face recognition  
<http://www.plettac-electronics.de>  
<http://www.eTrue.com>  
<http://www.viisage.com>  
<http://www.visionics.com>  
<http://www.biometricaccess.com>  
<http://www.dermalog.de>
- [2] Iris recognition : <http://www.irisscan.com>
- [3] Sensar : <http://www.sensar.com>
- [4] Dermalog : <http://www.dermalog.de>

