

Examinee Verification in Examination

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Abstract: This project deals with the verification of student's identity during an examination. NFC technology along with Finger Print Scanner are used on a restricted usage mode activated mobile device to verify identity of the examinee. The input from the student's NFC enabled ID card and his finger print is matched with the existing database using the Wi-Fi technology and this results in extensive verification of examinee during an examination and raises alarm with the help of an in-built buzzer if an impersonator tries to give exam for someone else. This results in zero tolerance for impersonator and helps in conduct of a completely unbiased examination.

Keywords: Finger Print Scanner, NFC, Wi-Fi

1. Introduction

The attendance management can be a tedious task when it comes to pen and paper. In today's era, we have enabled technology to such a great extent that attendance marking has become relatively easy and less time taking task. Talking about Universities, we can genuinely say that the University have a very strong network and works in a well synchronized manner. But when it comes to exams, the Universities sticks to old pen and paper attendance marking system which is quite a tedious task as well as involves multiple problems like man power for circulation and management of attendance sheet throughout the University. Moreover, there stands a risk of identity theft commonly referred as impersonation which involves fake person to take exam for someone else as there is no biometric [1] identity verification possible during examinations. The consequences vary from bad quality of results to underperforming individuals receiving a full-fledged degree. The case might seem to be of little concern but with time its adverse impact will only increase if proper steps are not taken within time limits.

In order to fight this malpractice and make the Universities withstand its integrity, we propose this project, which will not only eradicate the chances of impersonation but will also help in saving a huge amount of time and money by making a significant amount of cut in manpower which is huge in current prevailing system. Along with this benefit, it will also fasten the speed at which the examination attendance interpretation is done and it will update the database on the server [2] in real time as well. This project demonstrates a tip of the iceberg to what is possible in the field of safety, security and authentication by making the apt use of technology available to us in the world we live today.

2. Research methodologies

A. Existing system

The Current system works on pen and paper mode which results in high chances that someone can take ID card of another person and give exam for them. There is no effective way to identify the identity of the examinee on their seat when it comes to examination.

B. Proposed system

The proposed system brings in a restricted mode activated mobile device which has an inbuilt NFC [3] scanner and Finger Print Scanner and is connected to the Wi-Fi [4]. The device can be easily moved from seat to seat with the invigilator to mark the attendance and keep a check on impersonators. This will result in the following:

- Catching Impersonators
- Accurate Attendance
- Biometric Verification
- Real Time Database Updates
- Conduct of Unbiased Examination

3. Literature review

The implementation of this paper will provide various benefits to the student, staff and administration. As mentioned before it is in favor of making the exam process more legitimate and also complies with the universities policy of zero tolerance, the project completion will result in identity impersonation levels dropping to zero. On the other hand it will create the examination process crystal clear as the digital biometric authentication is done then and there leaving no scope for error. The project is mainly focused on making the examination attendance system more efficient therefore it will lead to a change in system that will eliminate chances of human error. There will be a significant reduce in the use of paper as well, because we will be using electronic medium to circulate information. The project will also cut down the significant cost that involves man power, right from circulation of sheets by the runner to the collection of sheets. There will be clear visible drop in man power required at the administrative end too. As all the information will be updating in real time using the database on the server. Moreover, it will be a miracle for administrative department as sometimes the circumstances are odd, and making the last moment changes are inevitable. The current system in which we use pen and paper offers zero last

minute changes but if we switch to the application mentioned in the project, the last minute changes can be made extremely easy for all as there will be no hard copies of attendance sheets floating around. Tracking exam attendance progress will be just a click away and it will be easy to track all the exam attendance related activity online through applications or an access to the database.

4. Proposed system

The following block diagram depicts the working model of the proposed system.

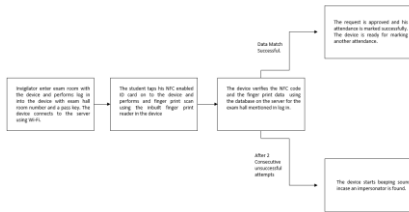


Fig. 1. Block diagram

5. Conclusion

The paper presented the implementation of Examinee Verification in Examination. This will make the examination attendance marking process completely digital and will make sure that no impersonator is present in the exam hall.

References

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