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RFID Based Smart Attendance System

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Abstract: ***In today's era of digitization, the focus of making our institutions digital or simply we can say that, making a smart institution has been integral part of our education system. Currently in places such as colleges, schools a manual calculations to record the attendance of the students is used. This is done by taking the attendance manually by passing around an attendance sheet for student's signature to record their presence. Details are marked in a register, future analysis of which takes a lot of time and is cumbersome.***

The aim of our project work is to reduce human efforts in monitoring the attendance of the students by employing a user friendly and automated way of attendance entry that can be recorded using an electronic register. This will save time and also help to identify students with attendance short-falls. Further detail of any student can be obtained within a few clicks at any time. This paper configures a system which specifies an application of RFID and database record entries. RFID is one of the part of Automatic Identification Technology and it is fast & reliable for indentifying any object. Our system eliminates time consuming method of manual attendance as well as maintains record of data entries which can be used for future administrative purpose. Keywords- RFID Reader, RFID Tag, Automated way of attendance, Cumbersome, Automatic Identification Technology.

I. INTRODUCTION

Attendance needs to be taken at various places including colleges, school for students and in the industries for the login/logout time of employees. Radio Frequency Identification (RFID) based attendance management system can be used in any college or university or company. Main objective of RFID based Attendance System project is to take the attendance of students or employees. Microcontroller does the task of storing the attendance of the respective person in the microcontroller memory. To demolish the flaws associated with the manual attendance system. We have implemented automated attendance system which utilizes RFID cards. Thus it is a RFID based attendance system.

However now a day's RFID cards are also available in small size or RFID key tags are available. These key tags can be connected with the key-chain. And normal RFID card can be stick together with the ID-card of employees or students. This means that there are no extra efforts required or no extra trouble is caused for carrying this card.

II. PROPOSED WORK

A. Working principle

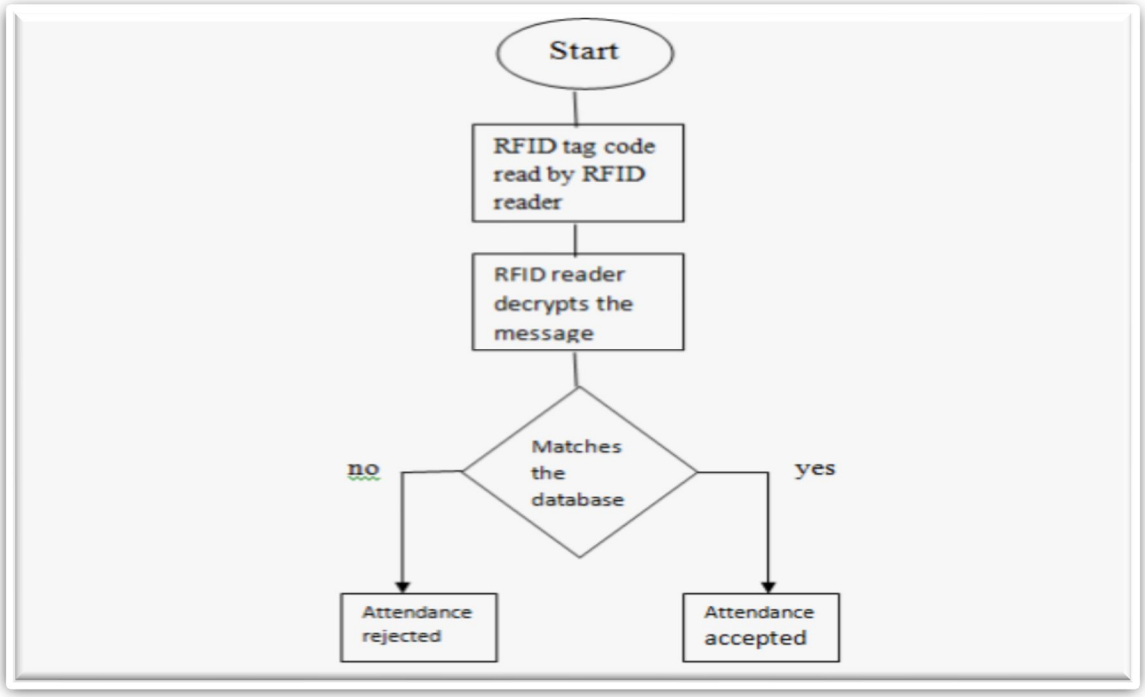
When the RFID reader detects the ID card, it will send the unique card no to the microcontroller via serial terminal. With the help of suitable programming, we need to compare the received card no. with the numbers that are already stored in the microcontroller or any database. Once, if any of these numbers are match with the received card no., then the corresponding name stored in that no. will be recorded in the system and also the attendance for the name stored in the corresponding number is marked.

III. BLOCK DIAGRAM



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IV. RESULT



When the system turn on RFID comes in the range and RFID reader transmit the signal to the tags and decrypt the signal. When the authorized code matches with stored information then only attendance has been recorded. If unauthorized card is detected then it will reject that entry.

V. CONCLUSION

The RFID based smart attendance system is more secure and reliable and fast responded. Tag works in any environmental condition. RFID technology provides tactical and better comfort and also promises an increased effectiveness and improves efficiency. Hence this project can be very much useful and can be implemented in real time application for attendance recording purpose.

VI. ACKNOWLEDGEMENT

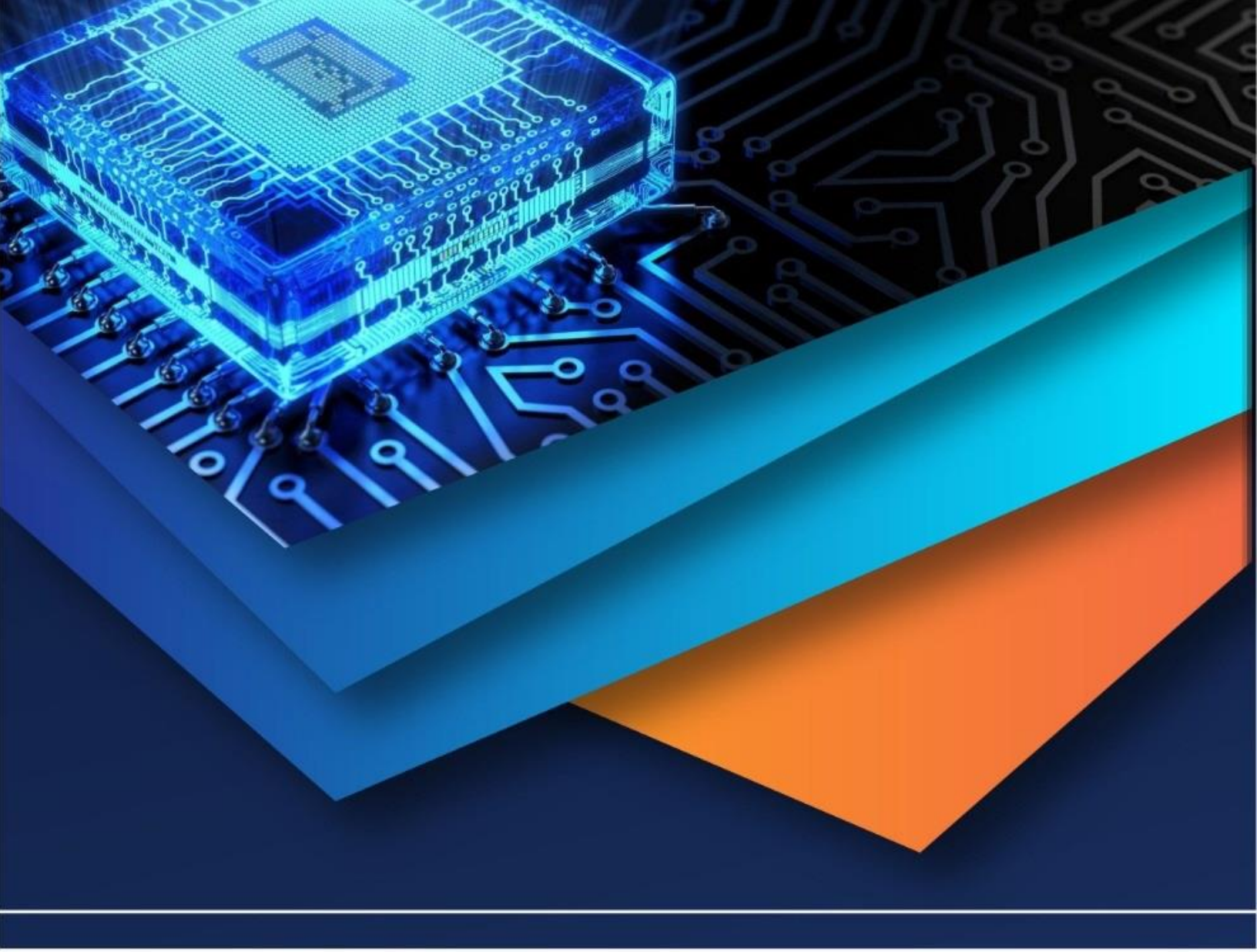
We have been given support continuously through tout our project by several individuals. We truly appreciate their support. We would like to thank Prof. K.K. Pandey for his guidance and supervision in completing the project.

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REFERENCES

[1] Bardaki.C, Kourouthanasis, P. and Pramatari, K, "Deploying RFID- Enabled Services in the retail supply chain: Lessons learned toward the internet of things", Information system management, Vol. 29:no.3,2012
[2] D. Maltoni, D. Maio, A. K. Jain, S. Prabhaker, “Handbook of Fingerprint Recognition,” Springer, New York, 2003.
[3] K. Srinivasa Ravi, G. H. Varun, T. Vamsi, P. Pratyusha, "RFID based security system", international journal of innovative technology and exploring engineering (IJITEE), volume-2, issue-5, April 2013
[4] Kumari lavanya, Midhila M, Eveline Blessy, B. karthik, "Automatic wireless attendance recording & management using near field communication(NFC)", International journal of advanced research in Computer engineering and technology Volume 2, Issue 4, April 2013
[5] Vishal Bhalla, Tapodhan single, Ankit gahlot, Vijay Gupta, "Bluetooth based attendance management system", International journal of innovation in engineering and technology, volume 3, issue 1, October 2013
[6] V. coskun, K . Ok, and B. Ozdenizci, "Near field communication: From theory to practice", international journal of information and education technology, volume 4, N0.5, October 2014
[7] World academy of science, Engineering band Technology journal, Volume 6, ppl-5,2009
[8] Fingerprint Database (FVC2002). http://bias.csr.unibo.it/fvc2002/ .

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