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FINAL REPORT OF DIPLOMA PROJECT

THUMB RECOGNITION BASED ATTENDANCE SYSTEM

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“ I declare that this report entitled “***THUMB RECOGNITION BASED ATTENDANCE SYSTEM***” is the result of my own group research except as cited in the references. The report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.”

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ACKNOWLEDGEMENT

No product is ever a result of the hard work of just one person. We believe that there are many who deserve a proper acknowledgement for this piece of work.

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ABSTRACT

Thumb recognition based attendance system has been developed in this project. The motivation on developing this system is to improve the efficiency and effectiveness of the current attendance recording system in the university which uses the smart card or signature system. The weakness of this traditional system is that they allow attendee to clock in and sign for others. This is because the attendance system only verifies the time and the particular attendance card or signature but not the attendee's unique identity. Therefore with this thesis, the feasibility of integrating the attendance recording system with fingerprint recognition will be researched and implemented.

In this piece of work, thumb recognition based attendance system is implemented by using a fingerprint sensor module and a PIC microcontroller. The system also includes a LCD display with switch buttons for functionality option and a buzzer for notification purpose.

This project has been successfully developed and proven in prototype. The system allows students to place their finger on the device to key in their attendance. The device will then scan the fingerprint of the user and match it with the fingerprints that are already stored inside the database attendance will be updated if their fingerprint matches the database. Lecturers can also access to few of the features such as enrollment of new student, delete student, day setting, view attendance records, exporting to pc, etc. With the device, it will be an added advantage to the university because it eases the process of attendance recording for lecturers in class.

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