

MAGNETIC DOOR LOCK USING KEYPAD WITH PIC 16F876A

LUQMAN HAKIM BIN SUHAIMI

MUHAMMAD AFIQ BIN MAT IZAL

MOHAMAD FAIZAL BIN GHAZALI

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Universiti Teknologi MARA

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DECLARATION

“I declare that this report entitled MAGNETIC DOOR LOCK USING KEYPAD WITH PIC 16F876A 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.”

Signature :

Name :

Date :

Signature :

Name :

Date :

Signature :

Name :

Date :

ACKNOWLEDGMENT

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ABSTRACT

From this day, there are many issues that always happen such as robbery when leave our belongings at some place. To overcome this problem, we want to create a project that can keep our belonging from any harm by using automatic identification system that is useful to recognize ID (identification). Radio Frequency Identification (RFID) is one of a component that suitable for this project. The main purpose of this project is to improve the security system which is affordable for everyone without using high cost. The components that we used to build this project are PIC 16F876A, small magnetic lock, Liquid Crystal Display (LCD), RFID reader, transistor and relay. This system can be powered by 9 V batteries or using AC – DC Adaptor (12V) where it is connected to the voltage regulator to produce 5V voltage for activated the PIC. It then displays their description such as ID numbers and user names to an attaches LCD screen when the RFID tag is detected. For the heart of this project, we use PIC 16F876A microcontroller as a brain of the system that will control the system through a source code (C code) build using MPLab software. In this project, passive tag will be used as an identifier of the user which is consisting the numbers of the user. Every RFID tag is unique because the ID of the tag is different for all the tag and its do not required any physical contact during the identification process.

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