SMART LOCK

MUHAMMAD AIZAD BIN SHUHAIMI

MOHD RIDZUAN BIN AMIR FEKRI

A project report submitted to the Faculty of Electrical Engineering, University Teknologi Mara in partial fulfilment of the requirement for the award of Diploma of Electrical Engineering

FACULTY OF ELECTRICAL ENGINEERING

UNIVERSITY TEKNOLOGI MARA

MALAYSIA

SEPTEMBER 2015

ACKNOWLEDGEMENT

In the name of Allah, The Most Loving and The Most Compassionate First and foremost, we would like to thank to Allah for giving us opportunity and strength to complete our final year project. We also grateful to Allah because during this project we are given excellent mental and physical in order to complete this project.

This project would not be complete without our excellent supervisor. We would like to express our appreciation toward Puan Siti Aliyah binti Mohd Salleh as our supervisor. There are many advices we took from her to make the report in correct format. Thanks to her guidance, encouragement and critics that have given to us to make our project and report better.

We would never have been able to complete this project if there is no supportive family. Our family have been support us to buy the material that need to make the project. They are also our motivator when we faced many problems in order to make the project successful.

Thank you very much to our friend because always supportive and helpful during this project. Thanks a lot because give us cooperation to complete this project. This project has makes our bond strong, sharing happiness and changing idea in developing this project.

Last but not least, we appreciate to all our friends that have been helping us. Thanks to all lecturer and colleagues that have help and assists us to fulfill the requirement needed in this project. Last words, we are grateful for having all of you beside us, thank you very much.

ABSTRACT

For this project, PIC microcontroller based project is designed to develop a low cost RFID lock. Before this, the RFID has been used for many purposes. One of the examples is the security door lock at the office. So the purpose for this project is to attach the RFID to the luggage which it only use combination code number before this. This is because luggage that use combination code number is easily been unlocked by people with such skill to open it. When the project is started, the RFID tag needed to be place near to RDIF reader so that the reader can read RFID tag and then send the tag ID to the PIC microcontroller. After PIC microcontroller process the data, the tag ID will display on LCD in decimal number and only particular RFID tag can pass the door lock. Therefore, Smart Lock is a technology with new improvement and innovation which will be applied in daily life application. This project could prevent people from stealing other people through pickpocket and also could make people aware of their luggage from mistakenly collected.

LIST OF FIGURES

LIST OF TABLES