Universiti Teknologi MARA

SMART PARKING SYSTEM

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Thesis submitted in fulfillment of the requirements for

Bachelor of Science (Hons.) Data Communication and Networking

Faculty of Computer and Mathematical Sciences

JULY 2013

ACKNOWLEDGEMENTS

"By the name of Allah, the Most Gracious and Most Merciful"

This research could not been finished without fully support and cooperation of many people. Firstly, I would like to thank my beloved supervisor, Mdm. Nurul Huda Binti Nik Zulkipli for all the advices and the guidance that had been given to me in order to complete this research. I am glad to be supervised by her.

I am also grateful to all the lectures and Dr Shahniza binti Kamal Bashah for guiding me in order to write this thesis report according to standard and opinions for the enhancement of the project. This was unforgetful experience that I had throughout the semester.

I also show my gratitude to my parents, Mr. Mohd Hanafiah Bin Hasan and Mdm. for their tremendous contribution and support both morally and financially towards the completion of this project. Last but not least, thanks to my siblings and friends for their support and encouragement towards this project.

ABSTRACT

The current parking detector used by parking provider nowadays used a lot of energy. This leads to the serious environment problem such as global warming. After analyzing several current parking systems used by parking provider, they actually use almost the same method and does not concern about the energy wastage which by using metal detector. However, in this project, the way this sensor operates is by turning off the LED bulb after detecting car which helps to preserve the energy. This sensor use Light Dependent Resistor (LDR) in order to function and act as indicator to detect car which help consumer in order to find available parking lot. Moreover, it can prevent the user from being a victim from unwanted situation. Admin can also oversee the system using simple system interface. The implementation of this project in real environment reducing environment problems and the usage energy can be saved for more important purposes.

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CHAPTER 1

INTRODUCTION

In this chapter there are descriptions about the background of the project. For this module, the usage of Light Dependent Resistor (LDR) was highlighted in order to replace the current sensor to detect the presence of car and reducing the energy usage.

1.0 BACKGROUND

This smart parking system overcome the problem upon the closed parking lot area. Firstly, it caters the findings of vacant lot problem. This smart parking system help customers to find their parking lot, by the usage of RFID technology and the low energy usage compare to the present technology.

For the parking lot, a sensor was used to detect parking lot whether empty nor occupied. This sensor used Light Dependent Resistor (LDR) which being placed at each parking lot. When car being parked, the LDR totally block from receiving lights as it is placed under the car and thus turning off the bulb which indicates the empty parking lot. This way helps to save energy rather than the use of LDR itself.

As additional, this parking system being integrated with simple system which helps admin to monitor the system. It helps admin in order to know the time in and out of the car for the payment purposes.