UMP VEHICLE ENTRY SYSTEM USING QR CODE

ABI SHAIFUL BIN YUSUFF

BACHELOR OF COMPUTER SCIENCE (COMPUTER SYSTEM & NETWORKING) WITH HONOURS

UNIVERSITI MALAYSIA PAHANG
SUPERVISOR’S DECLARATION

I hereby declare that I have checked this project and in my opinion, this project is adequate in terms of scope and quality for the award of the Bachelor of Computer Science (Computer System & Networking)

_______________________________
(Supervisor’s Signature)
Full Name: DR. ZALILI BINTI MUSA
Position:
Date:

_______________________________
(Co-supervisor’s Signature)
Full Name:
Position:
Date:
STUDENT’S DECLARATION

I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

_______________________________
(Student’s Signature)

Full Name : ABI SHAIFUL BIN YUSUFF
ID Number : CA15057
Date : 12 DEC 2018
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ABI SHAIFUL BIN YUSUFF

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ABSTRACT

In daily life of the University Malaysia Pahang area, safety and well-being is the priority of both students and staff among University society. Lately there are vehicle theft problems like motorcycle theft and car theft. To ensure the safety of vehicles in the University is controlled, the University Safety Division requires a system to record student information and vehicle information they use in University Malaysia Pahang. By referring to the problem, the University Vehicle Entry system is developed to filter and store data on all vehicles inside this area. The objective of this project is to develop an application to scan vehicles are located in the University via a QR code scan. When entering to the University users should only scan the QR code displayed on the screen at the guard post. The application is expected to assist the University's Security Division in detecting if thefts were happened. Repeated methodology was selected for the implementation of this project, there are six departments in this methodology, planning, design, requirements, design, implementation, testing, and dissemination. Upon completion of all appointments, a usability test will be conducted to get the app user's reactions so that the system can be restored. This process is carried out to ensure the objective of this system is achieved.
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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

In generally, QR code is stand for quick respond code which is 2-D matrix code that designed to keep two point under consideration, there is some cell on the code and it is arranged in particular pattern that can be recognized and deciphered when the symbol is read by the devices. In contrast it is quite different with bar code which is the code is not encode their information as function of parallel lines like barcode compare to 1-D matrix code, it has to be decode at high speed by using device like phone and computer.

By providing high data storage capacity and fast scanning it also provide error-detection, by having this feature the QR code can read damage code as it is still possible to read by the system. The QR code applied in different application stream relate to market, security and education. Nowadays this kind of technology is extremely popular and growth rapidly among the people because they have getting the attention and awareness about the technology of world wide.

QR code technology will be used in implementing project of entry system for ump vehicle, this is because it is very useful for security management to recognize either the vehicle entered are registered or not with UMP and can help University Safety Division to detect thief activities in UMP.
1.2 Problem Statement

There is a lot of car that enter to UMP every day, most of them are student and staff of UMP, but some of them are not. Depending on the case, security guards cannot identify either the vehicle has registered with UMP or not. So everybody from outside can get into UMP without having to be checked by the security.

Other than that, UMP security at main gate is not up to date and not performs well, everyday there are a lot of people entering into UMP and make security division cannot identify them whether they are UMP students or staffs. In this case, people who are not related with UMP can enter freely without any administration permission. This is dangerous as we cannot differentiate which vehicle is the outsider.

Another problem is some people have made duplicate their stickers so that they can have full access to UMP without the security bothering them. They can enter UMP any time without registering with the system in UMP. This is hard to detect that duplicated sticker and sometimes might confuse the security in terms of not checking with their database.

Therefore, the developer implement this project to make sure this project can help much UMP security division to ease vehicle entries every day and can make sure the problem to be solved immediately to prevent any unwanted problems from arising and hence making life in UMP not safe.

1.3 Objective

a. To study the advantages of using QR code for entry system at UMP

b. To develop and design a prototype for UMP entry system using QR Code for all community of UMP in web base and android version.

c. To test the functionality of the application
1.4 **Scope**

a. The system support services that allow user to scan the QR code that provide by administration at the main gate of UMP.

b. The systems is developed in web base and android version to make user and admin easy to use the system

c. The system is for UMP community only

1.5 **Summary**

Chapter 1 will discuss about introduction of the entry system using QR code in UMP. This chapter will explain the problem with the current application QR Code using smart phone. The research objectives is to filter and trace car inside UMP area. The scope of the proposed system is the user around UMP

Chapter 2 is Literature review, in this content will describes briefly the literature review of the existing project that have done by another company. This chapter will also analyse the technic that used in the technology that related to the system.

Chapter 3 will discuss about the methodology used in the design of the system. This chapter will discuss about hardware and software that will be used in the design phase. Timeline of the project can refer to the Gantt chart

Chapter 4 will discuss about the implementation process of the application QR Codes, the testing of the project also the result discussion about the proposed system.

Chapter 5 discuss about the conclusion of the research where constraint of the project and the project and the future work will be discussed there.
REFERENCES


