

UNIVERSITI TEKNOLOGI MARA

**APPLICATION OF QR CODE IN
TIME-VARIANT PARKING SYSTEM**

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**BACHELOR OF COMPUTER SCIENCE (Hons)
DATA COMMUNICATION AND NETWORKING**

JANUARY 2018

Universiti Teknologi MARA

**Application of QR Code in Time-
Variant Parking System**

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**Final Year Project Report submitted in fulfilment
of the requirements for
Bachelor of Computer Science (Hons) Data
Communication and Networking
Faculty of Computer and Mathematical Sciences**

JANUARY 2018

SUPERVISOR APPROVAL

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This report for the final year project was prepared under the guidance of the project supervisor, Sir Albin Lemuel Kushan. This project is for the submission towards Faculty of Computer and Mathematical Science and was accepted in partial fulfillment of the requirements for the degree of Bachelor in Computer Science (Hons) Data Communication and Networking.

Approved by

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Sir Albin Lemuel Kushan
Project Supervisor

JANUARY 3,2018

STUDENT DECLARATION

I certify that this report and the project to which it refers to is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

The number of developed mobile application has been drastically increased these past years, creating million of new users every single year. Applications helped in easing task and help to improve one's productivity, such as shorten a time-consuming task. For this project, the area that fully focused on are the time-variant parking areas. Based on a survey, many had agreed that purchasing parking tickets can be a bit difficult in terms of find the right store that sells them. It is time consuming and most of the respondent were looking forward to the development of this application. This project is going to create a new method of payment by implementing QR code, with the intention to replace the current payment method which is using parking tickets. Parking tickets is flawed in terms of its availability, flexibility and the material required to make one. Hence, QR code is secure more and it has a high tolerance against damage. This application will only require user to print out their QR code and paste in on the windshield of their vehicle, which afterwards scanned by fee collector. Method for this project depends greatly on the phases in the System Development Life Cycle(SDLC). Each phase process a different outcome and deliverables to fulfill the objectives and problem solving. These phases are planning, analysis, design, development, testing and documentation. Throughout the progress, functionality testing is performed to ensure that everything the application was aimed to do, reached the satisfactory level of users. Upon project completion, the application performance is measured based on its response time, effectiveness and feedback from user's experience. At the end, driver's may then pay parking fees through the application without worrying about purchasing parking ticket or not able to find store that sells one and fee collector's operation will conduct quicker than before.