UNIVERSITI TEKNOLOGI MARA

# QR CODE BASED MOBILE APPLICATION FOR PARKING SUMMON

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#### ABSTRACT

Recently, illegal parking was one of the critical issues that caused traffic congestion. Parking summons is given by Police Assistance act as security officer towards students who failed to follow the rules such as parking at the restricted area, vehicle that unregistered in UiTM system, vehicle who do not display UiTM vehicle sticker and others more. This project is being considered to ease the duty of the Police Assistance Security Department of UiTM Shah Alam related to parking summon for the student. The current system is in manually written in summon paper sheet and it is timeconsuming. It is also cost-ineffective, and the average return is low and diminishing. Moreover, the Police Assistance Security Officer manually writes and give parking summons paper sheet to the student who makes an offense of illegal parking on the campus. The goal of this project is to create a QR code-based mobile application for parking summon. Police Assistance Officer can use a mobile application to insert the summon details for students. Besides, the student can check do they receive any parking summon or not and included the notification messages on their mobile application. Parking summons could affect student's results and graduation because by having a parking summons without student concerns, it was considered as breaching the university's law because student do not pay the outstanding payment of parking summons immediately. So, by creating the feature student can alert and acknowledge about having the summon parking.

## TABLE OF CONTENTS

CONTENT	PAGE
SUPERVISOR APPROVAL	ii
STUDENT DECLARATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	V
TABLE OF CONTENTS	vi-ix
LIST OF FIGURES	x-xii
LIST OF TABLES	xiii
LIST OF ABBREVIATIONS	xiv
CHAPTER ONE: INTRODUCTION	1
	JI
1.1 Background of Study	
1.2 Problem Statement	
1.3 Research Questions	
1.4 Aim and Objective	
1.5 Scope of Study	
1.6 Research Significance	5
1.7 Summary	5
CHAPTER TWO: LITERATURE REVIEW	6

#### **CHAPTER 1**

#### **INTRODUCTION**

This chapter provides the background and rationale for the study. It also gives details of the significance of privacy over Internet, the issues and problems that led to this research.

#### 1.1 Background of Study

Nowadays high technologies were among the amenities of the modern life. On the one handed, this state of things was a positive phenomenon since all sorts of technologies (sophisticated software, wireless networks and other incomprehensible to ordinary people things) were created solely for the purpose of simplifying and improving the everyday life of humanity. Over the years, technology had revolutionized our world. Technology had created amazing tools and resources, putting useful information at our fingertips. Modern technology had made it possible for the discovery of many multi-functional devices like the smartwatch and the smartphone. With all these revolutions, technology had also made our lives easier, faster, better, and more fun. Mobile communication services were penetrating society at an explosive growth rate. Applications in mobile devices offered limitations, restriction, and guidelines on how mobile software could be used in ordered to simplify the mobile usage. Technological developments with a growing number of mobile applications (app) available, as well as lowered costs, resulted in the widespread use of smartphones (Karthikeyan, Thangarajan, & Theruvedhi, 2019).

QR codes (short for quick response codes) were internationally standardized in 2000 and mobile phone users in japan had already widely adopted the technology by 2002. Although Denso wave still held patents over the technology, QR codes were free for anyone to use without a license fee if the intellectual property was being used