

**Universiti Teknologi MARA**

**Mobile Application for Parking Fee Payment**

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## **ABSTRACT**

Nowadays, people usually use mobile application due to increasing use of smartphones. Based on that, all things will be easy if they can only use mobile application rather than other recognized system such as using mobile application for parking fee payment besides using parking meter. Due to this situation, it gives motivation for the project to drive into this issue and come out with a new design and development of mobile application for parking fee payment. Moreover, it has been notified that the current systems are needed to be developed in order to gain efficiency towards globalization. The significant of this project will be helpful to the user because it will give the user flexible time to parking their car. The customer also will save their time on searching the in order to pay for the parking meter and save their money rather than paying on the coupon parking. Other than that, the mobile application will also help in maintaining the less paper environment. However, it will take time with the help of all conservation steps. This project also will help the administrative staff to observe the customers' details. The methodology used to assist this project is Modified Waterfall that consists of planning, requirement analysis, design, develop and testing. The technology used in developing the administrator system is Ubuntu 16.04 while the framework used in this system is Ruby on Rails. Besides that, the technology used in developing the mobile application system is Ionic 1. The MySQL2 as a database and Sublime is a source code editor. The future work recommendation that can be applied towards this project is to develop mobile application for the administrative staff.

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# CHAPTER 1

## INTRODUCTION

This chapter explains about the overview of project background. It includes the problem statement, objectives, project scope and significance of the system.

### 1.1 Project Background

In this globalization era, every people in this world will have their own initiative to grab each of the technology available, especially those that relate to their lifestyle. One of them is represented by smartphone which is technology that is growing rapidly.

However, the utilization of smartphone is limited because many applications are web based application. We know that mobile application will be more efficient for people to use because it is more flexible at any condition. The use of technology based on mobile application has become increasingly popular among smartphone's users nowadays.

This project will develop a mobile application for parking fee payment for Shah Alam City Council (MBSA). This application focuses on users with to park and pay their car parking fee. This project also will work together with the web based application. The web based will be used for administrator of MBSA for administration purpose. Once a user pays for parking, it will be updated in the system. Thus, the system administrator (MBSA officers) can check the payment status online while inspecting the cars parked in the particular area. The system will deduct the balance from the user's account at the MBSA.

As we know, MBSA is using metered parking payment or parking coupon for car parking. However, sometimes it will bring troublesome for certain cases. The