

**Universiti Teknologi MARA**

**Mobile Application for Public Parking  
Reservation System**

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**Thesis submitted in fulfilment of the requirements for  
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## **STUDENT DECLARATION**

I certify that this thesis 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 practice of the discipline.

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## **ABSTRACT**

Public parking congestion is a well-known major and challenging issue towards every emerging country in the urban region. If the issue is neglected, it would cause another series of problems. But in spite of that, City Council in Malaysia is currently making an effort in mitigating the problem by applying parking lot coupon using the manual method. The procedures of the manual method are inefficient due to several aspect challenges such as time spent on the procedures to use the coupon book, ticket exploitation, and waste in term of human and material resources. Therefore, the aim of this project is to develop a mobile application prototype for handling the process of parking reservation. Additionally, it enables users to view parking's availability. This project's target area will be in UiTM Arau on block F's left side building. This app will operate on the mobile device which is the smartphone in reserving the parking by choosing the available parking slot. The users may look over one of the features in the application to check the empty lot before going to the area. As for that, the exploiter will manage their occasion well and avoid the peak-hour. The application will be tested in term of functionality and usability by distributing questionnaires and sample of the prototype to the communities in UiTM Arau, Perlis. As the result, this project is expected to discover the feasible solution for the linked issue by implementing the mobile technology for the research and development purpose.

Keyword: Urbanization, city management, public parking, mobile applications, mobile technology

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