

DEVELOPMENT OF SMART PARKING SYSTEM

by

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Report submitted in partial fulfillment
of the requirements for the degree
of Bachelor of Engineering



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APPROVAL AND DECLARATION SHEET

This project report titled Development of Smart Parking System was prepared and submitted by Norbaiti Adzlina bt. Basharudin (Matrix Number : 031020716) and has been found satisfactory in terms of scope, quality and presentation as partial fulfillment of the requirement for the Bachelor of Engineering (Computer Engineering) in Universiti Malaysia Perlis (UniMAP).

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PEMBANGUNAN SISTEM TEMPAT LETAK KERETA YANG BIJAKSANA

ABSTRAK

Development of Smart Parking System menawarkan kesenangan dan menyelesaikan jawapan kepada masalah untuk mencari tempat letak kereta yang mudah dalam kawasan yang luas dan di kawasan tempat letak kereta bertingkat-tingkat. Bak kata pepatah, ‘masa itu duit’ yang sentiasa digunakan sebelum ini, sistem ini *ramah pengguna* dan dapat mengurangkan masa pemandu untuk tidak membuang masa seperti mana mereka dapat mencari banyak ruang tempat letak kereta di setiap tingkat dengan masa yang bersesuaian. Sistem ini sendiri terdiri daripada *pengguna antaramuka* yang pada pintu masuk garaj tempat letak kereta, di mana sistem ini membenarkan pegawai tempat letak kereta untuk melihat semua tempat letak kereta yang masih kosong. Walau bagaimana pun, sistem ini dianggap menguntungkan, pegawai tempat letak kereta diberikan percuma untuk melihat setiap tingkat dan memilih mana-mana tempat letak kereta yang masih tersedia. Bila satu kotak tempat letak kereta dipilih, simbol objek yang direka akan menjadi panduan kepada pegawai tempat letak kereta untuk menentukan tempat yang dituju. Sebagai tambahan, tiket dengan arahan yang tertera akan dicetak untuk tujuan pemulangan garaj tempat letak kereta sebagai panduan kepada pemandu ke kenderaannya. Teknik pendekatan yang digunakan untuk projek ini ialah sistem perisian untuk memperkenalkan ‘konsep pembuktian’. " Saya mereka bentuk keseluruhan grafik *antaramuka* untuk mensimulasi perisian sistem yang sebenar ". Sistem dan grafik di programkan menggunakan VB.NET. Antara muka digunakan untuk menyimpan nombor kereta, masa masuk, masa keluar and jumlah bayaran. Saya menyempurnakan segala-galanya untuk di setkan dan boleh dikatakan meyakinkan projek ini untuk berjaya.

DEVELOPMENT OF SMART PARKING SYSTEM

ABSTRACT

The Development of Smart Parking System offers a simple and comprehensive solution to the problem of finding a convenient parking spot in large, multi-level parking garages. In an age where the adage 'time is money' seems more applicable than ever before, this user-friendly and adaptable system will eliminate the time drivers are forced to waste as they circle various parking garage floors looking for the optimal spot. The system itself consists of a user-interface at the entrance of the parking garage, which allows the parking attendance to view all available parking spaces. Although the system will recommend the spot it deems most favorable, the parking attendance is free to view each floor and select any available spot. Once a spot has been selected, a series of symbol built into the road will guide the parking attendance to their chosen destination. In addition, a ticket with directions will be printed that can be used upon return to the parking garage to guide the driver to their vehicle. The technical approach that I used for this project is a software system to produce a "proof of concept." I built a full graphical interface to simulate the actual software based system. This system and graphics are programmed using VB.NET. Interface is used to store the car number, time in, time out and parking amount. I accomplished everything that I set out and can confidently say that my project was a success.