UPS: UMak PARKCARD SYSTEM

A Research Project
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by

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ABSTRACT

The study aimed to design and develop UMak Parkcard System using a swipe machine in Local Area Network environment that monitors and determines the total number of slots available in the parking area and registers University employees, students and visitors who have car and/or motorcycles.

Microsoft Visual Basic 6.0 was used to develop the graphical user interface, Microsoft Access was used as the back-end of the study and Adobe Photoshop was used for image enhancements and for the system design.

The system comprises of two modules, namely: the front-end and back-end modules. The Front-end module was intended for the use of the authorized users of the system. The back-end module was organized for the administrators or Officer-in-Charge. Some features of the system are: it can reload accounts on the student's card and presents a graphical presentation of the available and occupied slots. The developed system was not suited for wide area network application (WAN), particularly for the actual monitoring of specific vehicle for the designated slots. Back-up have no security device like surveillance camera and a sensor to monitor the members in the parking area.

The developed system was evaluated using the following criteria: functionality, reliability, user-friendliness and maintainability. The respondents randomly selected 40 respondents which were classified into two, namely: I.T. expert users and Non-I.T. expert users. The I.T. expert group rated the system as **highly acceptable** with over-all mean of **4.54**. On the other hand, Non-I.T. expert group rated the system as very acceptable with an over-all mean of **4.44.** The project got an over-all mean of **4.54** which proved that it was **highly acceptable.**

UMak Parkcard System is capable of storing volumes of data in a database. Using MS Access database can store thousands of data for the UPS program. The researchers highly recommend future researchers to add features like addition of security device like surveillance camera and a sensor to monitor the customers in the parking area.