

MECHATRONICS BOOK SERIES SYSTEM DESIGN AND SIGNAL PROCESSING VOLUME 1

Editors

**Asan G. A. Muthalif
Amir Akramin Shafie
Siti Fauziah Toha
Iskandar Al-Thani Mahmood**



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CHAPTER 7

Automatic Intelligent Ordering System: Design and Tools Selection

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7.1 Introduction

This chapter presents the essence design software of Automatic Intelligent Card-Based Ordering System: a current scenario in Malaysia's fast-food service counter. The study will concern on three major phases which are Database Collection Centre, Menu Selection Base as well as the Prepaid Card Detector. A database system which contains of all related information on the menu and payment is build and available for user to access via the visual user interface. The Graphical User Interface (GUI) for both server and client application is developed using Visual Basic 6.0. An enormous demand for storage capacity and the amount of information that can be stored in a small space increased so therefore, a prepaid card system is introduced as the final stage. The endeavor of the study is to construct a networking application to a real basis life and also, the established system can minimize or eliminate the use of manhandling food counter at the fast food outlets. Moreover, as the research study is concerned Smart Card system [1] has met the requirement as an expended application field of electronic money. There are four objectives to be concerned in this chapter which are: 1) To establish a system where the fast food counter can be eliminated or its usage minimized. 2) To design a menu selection system that is located on the eating table so that customers can be assured of a seating location upon ordering. 3) To ascertain a data management where statistical data is available for the system and can be viewed easily. 4) To implement the use of prepaid card system using smart card application where customers do not need cash to pay for their food.

7.2 System Architecture

As stated in the introduction above, the system is designed in response to a foreseeable problem encountered in our daily life. The fast food outlet is but one of the locations where a similar system can be implemented. It is hence one of the applications where cashless convenience could be enjoyed. By doing this project, the author is hoping to be able to come up with a stable and complete system which can be used at the outlets.

The project can be subdivided into several sections (Fig. 7.1). The three main sections of the system are:

1. Data Collection Centre
2. Menu Selection Base
3. Prepaid Card Detector