# MECHATRONICS BOOK SERIES

SYSTEM DESIGN AND SIGNAL PROCESSING VOLUME 2

Editors Md. Raisuddin Khan Md. Mozasser Rahman Muhammad Mahbubur Rashid Shahrul Na'im Sidek



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#### **Editors**

Md. Raisuddin Khan Md. Mozasser Rahman Muhammad Mahbubur Rashid Shahrul Na'im Sidek

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### CHAPTER 9

# ELECTRONIC SMART ORDERING SYSTEM: GRAPHICAL USER INTERFACE

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#### 9.1 Introduction

Fast food outlets are fast becoming the food of choice for today's' society. There are numerous fast food outlets in the markets now ranging from western food such as Mc'Donalds and Kentucky Fried Chicken (KFC) to local cuisines such as Mee Rebus Ramli. The concept of fast food outlets is that a customer can go to the counter, order from a set menu, pay and then receive the food. The service should be fast hence the name 'fast food'. Fast food outlets are a convenient location to purchase food especially for working people during their lunch break. This is highly evident in areas such as the Klang Valley where we can see an extremely packed Mc'Donalds or KFC during lunchtime.

Another changing aspect of modern society is the cashless society. Many monetary transactions are conducted electronically. The exact exchange of cash between two parties is no longer considered the only way of buying and selling. Nowadays, there are many other alternatives to cash such as checks and credit cards. Another example of an alternative is prepaid cards. Prepaid cards are now a common means of using a service. Examples of prepaid cards usage are the card phone, toll services such as Touch N Go cards and even Internet usage.

#### 9.2 Graphical User Interface Design

In brief, a graphical user interface can be defined as follows. A user interface is a collection of techniques and mechanisms to interact with something. In a graphical interface, the primary interaction mechanism is a pointing device of some kind. This device is the electronic equivalent to the human hand. What the user interacts with is a collection of elements referred to as object [1-4]. Today, most applications have a Graphical User Interface (GUI). A GUI provides visual clues such as small pictures, or icons, to help the end user give instructions to the computer. Microsoft Windows is the most widely used graphical user interface. However, the GUI still has the advantages and the disadvantages which are briefly explained in Table 9.1.