CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

Kanban Food Ordering System (KanbanFOS) is a wireless food ordering system developed in order to provide an efficient and accurate orders management for the use of restaurants. The project’s aims is to digitize the current traditional techniques of order taking and management; and improve restaurants’ reputation for providing quick and excellent services to customers and also improve the dining experience of its customers.

This system implements wireless data access to servers. There are three type of users for this system, which are Waiters, Chefs and Admin/Cashier. The Android application on waiters’ mobile will have all the menu details. This enables the waiters to take orders using their Android-based mobile phone easily. The order details from waiters’ mobile are updated wirelessly in the system’s central database and is subsequently sent to the kitchen and cashier. The chefs will view the orders using a desktop application while the admin/cashier will view the orders using a desktop application for billing purpose. The admin/cashier can also manage the menu modifications easily.

By using this system, the orders management efficiency and accuracy will be improved. This system will helps restaurants to organize the orders taken by waiters. The orders taken will be in sequence using the method of First In First Out (FIFO), and this
will helps to increase customer satisfactions. The application on mobile devices will provide convenience to restaurant, and improving order management efficiency and accuracy. And, it will also help saving time and reduce human errors.

1.2 PROBLEM STATEMENT

The advancements in food ordering techniques has contributed to the increase of competition in restaurant business. Currently, most restaurants are still using the traditional techniques of order taking and management. The traditional techniques of order taking and managements was entirely a manual process which involved waiters, pen and paper. Traditional method of order taking and managements phase are described as follows:

i. Waiters take orders and write it on orders sheet
ii. Waiters bring the orders sheet to the kitchen
iii. Chefs review the orders sheet
iv. Chefs prepare the orders
v. Chefs call for the waiters once the orders are ready
vi. Waiters bring the orders sheet to the cashier for billing purpose.
vii. Waiters send the ordered food and drinks to the customer

Even though this techniques is simple, there are numerous downside of this techniques. One of them is the orders are not in sequence. Customers that arrived early are sometimes get their orders late and customers that arrived late are sometimes get their orders early. This techniques may also involve human errors in noting down the orders. In results, some customers will be less satisfied with the restaurants’ service.

In this project, the problems are investigated according to these questions:

i. What is the best solution to replace traditional techniques of order taking and management for restaurants?
ii. What is the best and simplest ways to manage and organize orders and improve
the efficiency and accuracy?
iii. How the Kanban Food Ordering System will be implemented to save time and
effort?
iv. How the Kanban Food Ordering System will help to improve orders management
efficiency and accuracy?

1.3 OBJECTIVES

The main objectives of developing this system are:
   i. To study the development of mobile-based applications and wireless
      technology.
   ii. To develop a wireless food ordering system for the use of restaurants.
   iii. To test the functionality of the system based on its scopes.

1.4 SCOPE

The scope of this project has been researched before the system is built. The scope
project is important to make sure the system meets the requirements. The scopes for this
project are:

   i. This system is only for the use of restaurants.
   ii. This system implements wireless data access to servers.
   iii. There are three type of user for this system. Which are waiters, chefs, and cashiers.
      a. Waiters are using Android Applications. Only waiters can place and add
         orders. Waiters can also check the ordered foods and drinks availability (if
         and only if the orders are already placed).