CHAPTER 1

INTRODUCTION

This chapter will focus on background of this project, problem of the manual system, the objectives, scope and significance of the project.

1.1 BACKGROUND

A barcode reader, also called a price scanner or point-of-sale (POS) scanner, is a hand-held or stationary input device used to capture and read information contained in a bar code . A barcode reader consists of a scanner , a decoder (either built-in or external), and a cable used to connect the reader with a computer. Because a barcode reader merely captures and translates the barcode into numbers and/or letters, the data must be sent to a computer so that a software application can make sense of the data. Barcode scanners can be connected to a computer through a serial port , keyboard port , or an interface device called a wedge . A barcode reader works by directing a beam of light across the bar code and measuring the amount of light that is reflected back. (The dark bars on a barcode reflect less light than the white spaces between them.) The scanner converts the light energy into electrical energy, which is then converted into data by the decoder and forwarded to a computer.

Student Attendance for Final Examination System is developed to calculate the number of student who attends the exam in certain subjects. This system using bar code which scan the student card before they enter exam hall. Student attendance for final examination system consists of many functions that determine the purpose of the system. Since the system directly not involved student, the actor/user of the system is examiners. Different user serves different purpose into the system. Some of the activities in the system require the involvement of both user and the data updated by the user will be recorded sequentially into system.

1.2   PROBLEM STATEMENT

Traditionally, student attendance is taken manually by using a list of names provided by the university the attendance. With a manual system, there are some problems faced by the invigilator because they have to find their names and sign the attendance of students in the list of names that have been given by them. This can cause, they will be overlooked due to the size of the paper that is printed quite small. Invigilators will also face the problem of error checking student attendance if no name or id is almost the same student. So as an invigilator, they should be careful when signing the attendance of students.

Because of this problem, a system may be needed in order to records the attendance of the students more accurately without have to trace manually by lecturers. A bar code will be provided at each exam hall. This system will record the attendance of students or absence in exam hall with checking their name in name list that given by faculty. This is to ensure that the students have attended their examination and give facilitate for staff or lectures that in charge during final exam.

1.3 OBJECTIVE

The objective is important to achieve the goal. The main objectives of this project are:

1.3.1 To develop the Student's Attendance for Final Examination System

The first objective is to develop Student's Attendance for Final Examination System. This system will record the attendance of the students and show list of name of students in examination hall.

1.3.2 To develop the Student's Attendance for Final Examination System using bar code

The second objective is to develop Student's Attendance for Final Examination System using bar code. Examiner will scan the student card.

1.3.3 To keep records of students into database

Since an existing system using paper to take attendance from students, possibility to lose data of attendance very high because papers of list name of students will be missing suddenly.

1.4 SYSTEM SCOPE

The scope of this project are :

1.4.1 System

- Record student attendance
    - Examiners will scan student card before their start examination. From this, all the records will keep in this system. This system use only for final examination.
- View record.
    - After all the records save in this system, staff or lectures can view student name list by each subject and faculty and will sort by section.