CHAPTER I

INTRODUCTION

A. Background of Research

These days, technology is growing rapidly. This is indicated by the kinds of objects that are created to assist and facilitate the work of all human beings, for example, a computer that can do many things and in any field of work, not least in the field of identification.

According to the Oxford dictionary (online), identification is the action or process of identifying someone or something or the fact of being identified. According to Poerwadarminta (1976: 369) "identification is the activity to define or determine of the identity of a person or object". Based on these definitions, identification is an activity in which a person can perform a determination of the object or person and it refers to the indicators that have been determined.

There are many applications of identification, such as in of inventory control, including computer inventory where people record some computers that belong to an agency. Data accuracy of inventory is required to determine how many computers are in and out of the laboratory and count the numbers of computer. This identification is used to detect some computers to know about its attributes, such as name, registration number and year of entry.

The existence of a technology can facilitate the identification to identify the attributes of inventory. This identification technology is called Radio Frequency Identification (RFID). RFID technology can be used for inventory control and it has some advantages, such as it can read some registration numbers at once without directly contact (contact less) and it is not necessarily aligned with its reader.

B. Problem Statement

Based on the reason of background of study above, the author states some problems, such as:

- 1. How to manage the RFID technology to identify the inventory which is available in a room?
- 2. How to manage data recording in a database and generate its report?

C. Problem Limitation

Considering from limited ability of the author, this study has some problem limitation to achieve the goals. Problem limitation is as follows:

- 1. This research will focus to RFID system design to identify the inventory and save record to the database.
- 2. The identified objects are computer especially at computer laboratory.
- 3. The author does not create a web based application to display the records of inventory, but using the desktop application.

D. Purpose of Research

The purpose of this research is to create a program for managing laboratory inventory using RFID as the main input and output port and create a program to manage and report the inventory data.

E. Benefit of Research

The expected benefits of these researches are inventory system controlling is easier, serve automatically data report and avoid the theft of computer equipment.

F. Writing Systematical

Writing Systematical is created to facilitate essay arrangement processing. Writing Systematical to be used is:

CHAPTER I INTRODUCTION

This chapter contains the background of research, problem statement, problem limitation, purpose of research, benefit of research.

CHAPTER II LITERATURE

This chapter contains some study of researches and fundamental theories which are used for complete this essay.

CHAPTER III METHOD OF RESEARCH

This chapter contains about the object being studied and some activity to study for object.

CHAPTER IV RESULT AND ANALYSIS

This chapter contains about the design of system, result of testing program and its analysis.

CHAPTER V CLOSURE

This chapter contains conclusion and suggestion of all activity of research.