**Chapter 1**

* 1. **Introduction**

The Computer Lab or Computer Laboratory is obviously part of the institution like Schools and University. For the reason that there are several matters that uses computer like computing of data, creating documents and many other task that uses computers for faster data processing. At schools almost all courses are having computer related subject to learn about computers. Nowadays, the uses of automated systems today are becoming trends. Creating one makes monitoring, adding security values, and identifying made easier. In places where there is a lot of users are accessing the equipment needed for every one’s lives, there is a tendency of loss is high due to weakness in items monitoring; or because manual monitoring is a laborious work and needed to be done at one step at the time.

* 1. **Background of the Study**

The University of the East also known as U.E. is a private university located in [Manila](https://en.wikipedia.org/wiki/Manila), [Philippines](https://en.wikipedia.org/wiki/Philippines). It was founded in 1946. [Lucio Tan](https://en.wikipedia.org/wiki/Lucio_Tan) acquired the university in 1990. UE was once labeled as the "largest university in Asia" once having an enrollment of over 60,000 students. UE offers degree programs in commerce and business administration, law, dentistry, engineering, arts and sciences, fine arts, education, computer technology, nursing, physical therapy, medicine, hospitality management and graduate studies. UE has two other campuses, one in [Caloocan](https://en.wikipedia.org/wiki/University_of_the_East_Caloocan) and its medical school, the [UE Ramon Magsaysay Memorial Medical Center](https://en.wikipedia.org/wiki/University_of_the_East_Ramon_Magsaysay_Memorial_Medical_Center) located in Quezon City. The four-story Engineering Building was inaugurated in 1980. What used to be the technical shops were gradually converted into classrooms for the students of the College of Arts and Sciences and the College of Business Administration until November 2003. It is a four-story building that houses over 50 lecture rooms, 24 laboratories and lab rooms, tool rooms and stock rooms, two machine shops and the Campus's two Multipurpose Halls.

The CTAF (Computer Terminal Attendance Form) is a form that given to the students that going to use the computer laboratory rooms in College of Engineering of University of the East Caloocan. The student must sign the form by their name correspond to their terminal number, ID number, signature and check the parts of the terminal if complete or having problem. The College of Engineering where the home-base of Computer Laboratory rooms and IT/CS department that will benefit the success of this study to enhance their learning skills according to their respective course.

* 1. **Theoretical Framework**

**Existing System**

**INPUT PROCESS OUTPUT**

* Lab activities, seatwork and exams should be printed
* CTAF

Manual Processing

* Some of the printed paper like lab activities, seatwork and exam may be lost or damage result cannot be recorded
* Some of the data might be hard to read due to manual handwriting

**Figure 1.3.1 Theoretical Framework of the Existing System**

The paradigm shows that the manual/written procedure is not given consistency. Most of the laboratory activities, seatwork and exam are printed and obtain much time and papers that is not appropriate to a computer laboratory. Written attendance can make a ton of errors if the students are not mindful where to write their data manually. The problem is that the written system is not editable and may result to a disorganized situation.

**Proposed System**

**INPUT PROCESS OUTPUT**

Check and monitor the activities, attendance, seatworks and exams of the students.

It will directly to professor module

* Students and Professors uses computer to log-in
* Lab activities, attendance, seatwork and exams will be able to access through computer

**Figure 1.3.1 Theoretical Framework of the Proposed System**

The paradigm shows how the proposed system answers the needs of the existing system. From lacking of portability or mobility, the problem of written system and not editable result to a disorganized situation was answered.

* 1. **Conceptual Framework**