## ABSTRACT

The ENS FIT Laboratorium is an extension of the Laboratory of the Embedded and Network System of the Faculty of Applied Sciences, this Laboratorium is located on the 1st floor of the Faculty of Applied Sciences precisely in the G3 room, Scheduling system is an activity to determine when and who can do certain jobs. This system is equipped with a database that acts as a database and information storage for people who can enter the room. The use of this database as a repository that will store data is then recalled when it is connected with a fingerprint so that the ENS Laboratorium door can be opened. The goal is to design a Laboratorium room usage system based on a schedule that can be accessed by using a number of sensors such as fingerprints, RFID, Keypad and Face Recognition and to improve security by always recording history in the room so that it can find out people entering the Laboratorium room. The working method used in this final project is the Waterfall Development Model which consists of several stages, namely requirements analysis, system design, writing program code, testing the program and implementing the program. The outcome of this final project is the system is able to handle the recording of user history and scheduling that comes into the Laboratorium room, able to manage the scheduling of user history, able to display the scheduling of user history, able to generate reports for each user who login and enters the Laboratorium.

Keywords: Database, Scheduling, History, Web