

## **ABSTRACT**

Educational institutions such as universities or colleges, certainly needs tools supporting quality teaching and learning process. As an example of a tool supporting the campus teaching and learning activities are LCD projectors in the classroom. Function of the LCD projector is very important because it can display instructional materials from lecturers. Inseparable from the important function LCD projector, it turns out there are some problems to be faced when lectures take place regarding the LCD projector. The problem is sometimes provided in class LCD projectors have not been lit so that the learning process to be delayed. In addition, sometimes when lectures end LCD projectors still be turned on resulting in wasted electricity.

Therefore, in this final project design has created an interface as a remote distance on the LCD projector in the classroom. Interface is designed from a minimum system with ATmega8535 microcontroller which is connected to a network of Local Area Network (LAN) via an ethernet to serial module. Module used in this project as a module WIZnet ethernet to serial. While on the mechanical side to suppress the existing power LCD projectors use a central lock. The entire system is controlled remotely via a computer with software that has been designed.

The results of making the final project can provide the smooth running of teaching and learning in the campus. With LCD projectors can be controlled remotely as well simplify the task of campus employees, particularly officers rooster in the works. As well as the most important outcome is to provide a positive thing for the quality of student Telkom Bandung Institute of Technology campus.

Key words: LCD projector, interface, remote, ATmega8535 microcontroller, WIZnet module, central lock, software, Local Area Network (LAN)