

ABSTRACT

An understanding of the workings of the microcontroller in Microcontroller Applications practicum course in Telecommunications Engineering study program D3 is essential. Introduction of microcontroller tools, functions, and how to use these tools is very important to be known by every student, students are expected to apply the workings of the microcontroller. It will be an obstacle for students if they are not tersedianya lab equipment or a lack of equipment - ancillary equipment therein. The students will find it hard to understand and comprehend the application in the course of the application microcontroller, in terms of practical and essentially programming.

To overcome these problems, in this final project created a GUI for programming the kit arduino microcontroller lab module. A program created based on lab-based kit arduino that have been made. At this GUI-based application user can directly select the desired program and then upload it to the board arduino program.

This final project resulted in a GUI-based program that can be used to upload programs to arduino directly. Arduino IDE that can be used for GUI-based program is up to the latest version 1.60. Program for temperature readings, interruption, light intensity readings, infrared, keypad to LCD, and digital clock no parameters are required for programs designed to read the response of the sensor or the input of each tool. While in the blink program, LCD display, LED running and servo parameters that are required to manage the program.

Keywords: GUI, Microcontroller, kits, Arduino,