ABSTRACT

Information needs are im*port*ant for society in this more advanced era. Media information takes various forms, from conventional to unconventional. LED display is one of the most widely used information media because it is more attractive to look at. To be able to work the LED display requires a microprocessor that functions to operate data including sending data, data display settings, and data changes. The use of microprocessors is considered inefficient because of the low price. In addition, the control to operate the LED display is usually done by directly accessing and using additional devices such as a keyboard or flash drive which is difficult for the operator if the LED display is in a high place. LED display is mostly used for running text which only displays letters and numbers which re*port*s are monotonous.

The result of this final project is a system LED display that can be controlled wirelessly via a website without having to directly access the LED display. The distance that can be taken to control the LED display is up to 45 m with or without obstructions. The LED display can animate 2 images and text on a 32x64 pixel LED display with the use of electrical energy for both types of animation simulated in a simulation is around (2.9 - 3.0) Wh to increase the maximum maximum. Control of the system's LED display uses a microcontroller which functions to operate data including data transmission, data display settings, and data changes. Animations can be made in the form of animation options, animation speed, and text and clock options.

Keyword: *Microcontroller*, LED *display*, *Running text*