ABSTRACT

PROTOTYPE DESIGN RUNNING TEXT DISPLAY OF INFORMATION LED THE MATRIX BASED ARDUINO AND ANDROID CASE STUDIES : UNILA LIBRARY

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Unila have media of information, one of them is information board of Unila library. Running text can replace the information in the Unila library. In the unila library replace information on pasteboard was conducted by the officer by attaching paper inefficient. Based on these problems, the system designed as a substitute for the role of information on the wall information boards of use leds the matrix that convey information in the form of running text integrated arduino and android.

The concept of research methodology used is “Design Science Research Methodology for Information Systems Research”. Running text system can be created with arduino and android using wifi communication. Arduino function as the main control on the system and android as a media to change information display, while WiFi module functions as line communication between the microcontroller Arduino and Android. Display running text modul, LED Matrix P10 is used device designed using two software, Arduino SDK and Basic4Android to create Android applications in the form of LED Matrix Control.

Prototype design running text display of information led the matrix based arduino and Android for case study unila library shows good test results and achieve it’s purpose. Led th matrix who have information in the form of running text and Using wifi as the path of communication between arduino controller led matrix with android in accordance with designed so that replacement information more efficient.

Keyword : ATMega328, Arduino, DMD, LED Matrix P10, WiFi 232-A11