

ABSTRACT

The whiteboard is the main tool in the teaching and learning process. Until now, almost all teachers in Indonesia still use conventional methods to erase the whiteboard, namely by using human hands. This requires time that can hamper the process of teaching and learning activities. Therefore, a tool in the form of a microcontroller-based whiteboard eraser utilizes a motor as the main component that has been integrated with a microcontroller that will remove ink stains on the surface of the whiteboard using 2 Stepper Motors and 2 Servo Motors as the whiteboard eraser and Bluetooth module as a link between this device with an Android Smartphone device as a controller. In this final project, it can be concluded that the Whiteboard Eraser System is integrated with the Android Application using a Bluetooth connection which can operate the Whiteboard Eraser System. With 19 location options the user can select the desired location for the erase process where the Whiteboard Eraser System can operate according to the location choice that has been selected on the Android application to carry out the erase process on the whiteboard easily and practically according to the test results.

Keywords: *Whiteboard, Microcontroller, Arduino, Bluetooth, Motor Servo, Motor Stepper.*