ABSTRACT

Android Apps are now a new breakthrough in the field of software or smartphone operating systems. Utilization of a smartphone for a particular purpose is very popular with android users today. In everyday life some people are difficult to control an object, then made the remote control based on android.

In this Final Project, a remote control application is made to monitor and control the movement of projector lifter. The Arduino is connected with the HC-05 Bluetooth module and the ESP 8266 Wifi Module to receive data from android apps. The android app is created using Android Stuido. Motor setepper driven through the mode on click on android applications. The data format submitted by android application using header data to identify the movement of each motor setepper. The android app is designed to move the projector lifter up, down, rotate right or left.

The test results show that the application is able to give instructions to the projector lift well. This application has two choices of communication media namely Bluetooth and Wifi, data communications transmitted capable of transmitted in accordance with the distance in general that is 10 meters for Bluetooth and 100 meters for Wifi. Have an average delay time when sending data from apps to the projector 0.59 seconds for Bluetooth and 0.41 seconds for Wifi. And based on the results of comparison testing Bluetooth and Wifi, Wifi faster send data than Bluetooth. This application spends a relatively small storage capacity of 14.04 MB.

Keywords: Android app, Android Studio, Bluetooth, Wifi