

# ***Design and Build a Mop Robot Based on NodeMCU ESP8266 Using Android***

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## ***ABSTRACT***

*Along with the development of an increasingly rapid era, the need for effectiveness and efficiency is prioritized in various fields. This encourages people to be creative and innovate in the field of technology. The purpose of this research is to design a mop robot based on NodeMCU ESP8266 using Android. The results of this study are that the tool can be operated using Arduino IDE software, the tool is controlled using the Blynk application which gives orders to the NodeMCU with a Wi-Fi network connection that has a control distance of 140 meters, the tool works using a 7,6 VDC battery, battery can supply the components in the tool, while the components used are 2 relays with a working voltage of 3,3 VDC, a mop motor of 8,1 VDC and a water pump of 8,2 VDC. Based on the results of the PWM test, 240 mop robots do not move, when the PWM reaches 255 the mop robot can move. From the results of 21 overall tests, it is concluded that the mop robot works according to the button commands on the Blynk application with 100 % accuracy.*

***Keyword:*** NodeMCU ESP8266, Motor DC, Arduino IDE, Relay, Battery