Rancang Bangun Saklar Lampu Rumah Terkendali Jarak Jauh Menggunakan Aplikasi Telegram Berbasis NodeMCU

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ABSTRACT

Advances in electronic automation have recently developed rapidly and have an impact on human life. One example is controlling the home light switch. Sometimes people forget to turn off / turn on the house lights when they are in a hurry to go to work or interest that requires humans to be outside the house until late at night. It takes a switch controller that can be controlled remotely. Researchers are trying to solve the problem using controllers that have no distance limit. One of them is using the internet, namely the telegram chat application that has been set up. The light switch is controlled using the telegram chat application on the cellphone.

In this Final Project research, a remote control switch system was made to control the light switch using the telegram application's chatbot command. This tool's system uses NodeMCU ESP8266 as a microcontroller and a chatbot as an input provider. The command is sent via the chatbot. The chat command will be forwarded to NodeMCU ESP8266 by telegram. NodeMCU will process the command scenario from the chatbot via the internet network that has been connected to the ESP8288 NodeMCU. The ESP8266 microcontroller will then process the command from the bot chat server to the Relay Board according to the user's command input. The test result finds that the percentage of the system's success can turn on and off the lights 1,2,3 and 4 with an overall success rate of 100%.

Keywords: *Remote Control, Chat Bot, Telegram, NodeMCU ESP8266.*