

DESIGN AND DEVELOPMENT OF EXHAUST FAN CONTROL SYSTEM IN HOME KITCHEN AND ANDROID APPLICATION MONITORING

Agis Gunawan Sonjaya

*Electrical Engineering Study Program, Faculty of Science & Technology
University of Technology Yogyakarta
Jl. Ringroad Utara Jombor Sleman Yogyakarta
E-mail : agisgunawan21@gmail.com*

ABSTRACT

Currently the development of technology is very rapid, especially in the field of electronics. Many electronic devices are created and still work conventionally because human interaction is still needed in controlling these tools. The development of technology encourages us to make simple and environmentally friendly tools to help our daily lives, so that they can be useful for many people and function according to their intended use. Therefore, innovation is needed in the development of better electronic devices. Conventional electronic devices that are commonly used daily are exhaust fans. Exhaust fan serves to suck air in the room to be discharged to the outside, and at the same time draws fresh air outside into the room. Exhaust fans are commonly used in home kitchens. The kitchen is a room facility without a good air circulation system and only uses an exhaust fan. Smoke resulting from cooking activities has a risk to health. The function of the installed exhaust fan is to circulate air in the room. In this study, the researcher will design an exhaust fan system in a home kitchen with an android application control. The results of the automated system testing were successfully carried out with the system success rate reaching 80%. The results of testing the manual system with the android application (Blynk) were successfully carried out with a system success rate of 86%.

Keywords: *Exhaust fan, nodeMCU, Sensor*