

ABSTRACT

Embodiment of the quality of a healthy environment is a fundamental part in the health sector. Air as the environmental component which is important in life needs to be maintained and enhanced so can provide support for living things to live optimally. Air pollution today is increasingly revealing appalling conditions. One of the pollutants that cause a decrease in air quality are dust. Under certain conditions the dust is a hazard that can cause harm, such as fatal pulmonary function, or even may cause general poisoning. So it needs a good air circulation system to minimize dust in the neighborhood.

The Final Project goal is to produce a better air quality to support the needs of human for doing activities

The final project is using a DC fan motor to suck air from the outside of room and filter dust using wall water slides by water pump. And integrated by LDR sensor that detects the number of occupants in the room so it can save electrical energy when the system is not used and the LDR sensors to detect air filter that has been soiled due process filtering. The final project is utilizing a microcontroller as the main controller

Key words: dust, water pumps, motors DC fan, LDR