

PERANCANGAN SISTEM MONITORING PENYIRAMAN DAN PEMUPUKAN TANAMAN BERBASIS INTERNET OF THINGS

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ABSTRACT

In the current era of globalization, knowledge and technology are developing very rapidly. Therefore we must be able to master technology and be able to compete with other countries. Currently, the ease and efficiency of time and energy are the main considerations for humans in carrying out daily activities. Currently, watering by plant owners is still done manually, where someone has to hold a hose to water the plants one by one and then have to wait until all the plants are wet. Based on these problems, the author will take the title "Designing a Watering and Fertilization Monitoring System for Plants Based on the Internet of Things". The author will make a tool that can help someone in terms of watering and fertilizing plants. The design of this tool works to answer problems by providing direct notifications such as soil moisture, watering plants, fertilizing plants and weighing liquid fertilizer through an android smartphone. In this design, a monitoring system has been successfully designed as well as watering and fertilizing automatically by reading moisture levels and fertilizing according to a schedule. The result is that this system can provide the right water and fertilizer requirements for plants. Then the system sends information to the android smartphone that has been built so that it can monitor the plants anytime and anywhere.

Keywords: *Internet of Things, smartphones, plants*