ABSTRACT

A routine treatment for a plant is important, requires a tool that can treat a plant so the plant will be well treated. Watering the plant is one from another solution for giving a treatment. The owner of the plant nearly forget to water the plant. Time and distance is the problem that make the owner nearly forget to water the plant. A system was made to solve this problem by utilizing the latest technology so treatment for the plant can be controlled from afar.

By utilizing the properties of technology, a device connected to the Internet so it can be controlled remotely made a system that can take care of the plants by watering the plants. A device was made to take care of the plant by watering the plant and monitoring the plant. Solenoid valve used to control the water flow. Water will flow and watering the plant when the solenoid valve is open. The device consists of two systems, first is the watering system, and image capturing system. That systems are controlled by Intel® Galileo as a microcontroller. Intel® Galileo connected to the cloud via a gateway that controlled via a smartphone

This system needs 3.2991 Watt when in active condition. The watering system's response time needs 0.6211 second to operate it using WLAN network and 1.0736 seconds using 3G/HSDPA network. IP Camera was made to taking pictures for monitoring the plant visually and this system needs 1.177 seconds to run it using WLAN network.

Keywords: taking care of plant, watering system, Intel® Galileo