

ABSTRACT

Consistency in treatment is important in order to achieve patient recovery, sometimes many patients often forget this due to various factors, one of which is memory or memory. To support this, this tool was made with the aim of helping the elderly in remembering the schedule for taking medication. Smart Medicine Dispenser consists of ultrasonic sensor components, servo, wemos D1 R2, speaker and Blynk.

This system is designed for processing time data which will be processed into 2 (two) forms of alarm in the form of text message notifications and voice messages, which will be delivered to patients and nurses. By working the data entered into the Blynk application will be processed by the microcontroller with the help of WiFi which functions as a connector or bridge between the two systems. After the data is processed by the microcontroller, the data will be output through the speaker for voice messages and the Blynk application for text messages in the form of notifications. After the first message comes out, the microcontroller will send a message to the ultrasonic sensor to accept the presence of the hand, which will then be returned to the microcontroller so that the microcontroller can send commands to the servo to issue the drug and send a second message as a notification.

The results obtained from the tests and analyzes that have been carried out on the Smart Medicine Dispenser are that the touch distance received by the ultrasonic sensor is below 15 cm, the tool is suitable for use for a long period of time with 99% accuracy, after testing for 7 days.

Keywords: Smart Medicine Dispenser, Blynk, Ultrasonic Sensor, Wemos D1R2, Servo MG996R