Abstract

Drinking less water is often considered a trivial thing lately, even though 60% more total body mass is water content, so it is very important for health. Many people forget to fulfill their fluid needs because they are too busy with their daily activities without knowing that their body is getting weak due to lack of fluids. Based on these problems, the solution to solve these problems is to create a tool that reminds us to drink regularly and detect water in drink bottles or not microcontroller based. This technology will remind someone to drink from their drink bottles through the Blynk application which is integrated with the tool. Then, when the weight of the drink bottle is reduced, the device will record how much water is reduced by a weight sensor. Then, when someone wants to drink from a drink bottle will be known from the angle of the hand when drinking that is obtained from the accelerometer sensor. Then, after the data from the weight sensor and the accelerometer sensor are collected, a fuzzy logic method will be used which will determine whether someone drinks from the drink bottle or not. After that, the detected drinking detection will add up to trigger the tree planting game. The concept of the game made is the more often to drink from a drink bottle, the more fertile the trees planted, and vice versa. With the game of planting trees and monitoring the drinking accumulation system is expected to increase the desire to drink water regularly.

Keywords: Weight Sensor, Accelerometer Sensor, Microcontroller, Fuzzy Logic, Game