

ABSTRACT

Filter drinking water to produce healthy and safe drinking water with raw water available at home such as PDAM water, tap water, well water, rain water and others without electricity and without boiling in accordance with the Regulation of the Minister of Health. Starting with the many tools that are already automated using the Internet of Things (IoT) system which aims to make it easier for users and can ease human work to be more efficient, practical and easily controlled using a smartphone. Water is very useful for maintaining fluid balance in the body and influencing energy levels for maximum physical condition. Therefore we must maximize the quality of drinking water to be cleaner and free from bacteria.

This study aims to monitor the quality of drinking water in drinking water using an IoT-based water filter. This system is designed using several sensors that are connected to a microcontroller that is already connected to the internet network, so that the system can send the conditions in the water filter of the lake. Furthermore, data from some of these sensors will be sent to MySQL as a database and displayed through the website.

From the results of system testing, it is known that the tool can work well. In the Quality of Service experiment, data transmission from the tool to MySQL was also carried out, the average delay was 455.27 ms. Meanwhile, the average throughput is 2543 bps.

Keywords : Drinking Water Filter, IoT, Database