

ABSTRACT

The availability of water in life is very important to meet daily needs. The high use of clean water in daily life can result in the depletion of the availability of clean water, while the waste generated is quite a lot. A Water Treatment is needed that is useful for treating wastewater so that it can be reused and does not pollute the environment, in water treatment it is also necessary to control so that the feasibility of the quality of the treated water can be known and one of them is utilizing the Internet of Things (IoT) which is an innovation using the internet network to increase efficiency in work that can be used for water treatment and quality control.

In this final project, the author has designed an IoT-based Water Treatment system using adsorption and sedimentation methods in its processing, utilizing pH, turbidity and TDS sensors as monitored indicators to determine water quality using the website as the medium. This research focuses on wastewater treatment and control of water quality feasibility.

As the results achieved in this study, it was found that the level of effectiveness in water treatment can reduce turbidity to 57,98 NTU, reduce total dissolved solids in water to 464 ppm and neutralize pH levels to 2,56 to achieve clean water quality standards and increase work efficiency using IoT for monitoring in processing and controlling water quality with a delay time of 6,128 seconds.

Keyword: *Internet of Things, IoT, Water Treatment*