## ABSTRACT

The quality of a healthy environment can be seen from the quality of water used by humans as a support activity in life. One way to know the safety level of water consumption is by measuring the quality of the water. Currently the process of measuring the quality of water conducted by the government through BLH (Environment Agency) is still manually which requires testing directly in the field. However, with the development of technology there are many innovation tools are made to make human's work easier, such as microcontroller and internet.

Determination of water quality and water pollution level is determined by knowing the significant parameters that is the level of water acidity, water turbidity level and water temperature. Measurement of these parameters using sensors and test results was decided using fuzzy logic. The data from sensor will be sent to platform before it displayed on android.While the control of the ship is accessed using android smartphone that is connected with ESP.

From the results of tests performed can be ascertained that the function of the application can run 100%. And the process of downloading and uploading data also works well with a delay of approximately 0 until 3 seconds for the upload process and 0 until 1 seconds for the download process.

Keywords: sensor, android, pH, temperature, turbidity