ABSTRACT

Everyone would need water inportant for every one. Where the water is in flow from a device called valve. Valve is a tool that regulates and directs or controls the flow of liquid (liquid). In the implementation of this tool, the authors develop innovations in the Design of Tank Control Systems on Well Water Filtration in Sukabirus using Microcontroller and Android. This system aims to help users, can save water wastage and minimize work.

This system initially perform the filtering process from tank 1 to tank 2. After the screening process is complete, this system has input connected to the android phone via bluetooth module aims to control the tap control with a long distance processed by the microcontroller. The microcontroller used as the control brain is Arduino MEGA 2560. The use of Arduino MEGA 2560, ultrasonic sensor, water flow sensor, water pump and servo motor aims to control the process of controlling there is tap water automatically. Users only select the volume and time required for charging water into controlled containers through an android app. When the process of filling the container has been met, the information will appear on the android phone in the form of a text.

From the results of this final task testing, the design of the faucet control connected to the phone andorid not far to the expected. When the set point 5000 ml in 2 minutes, the test results obtained are 5030 ml in 1.59 minutes. Difference of error at volume and time only 30 ml and 1 second.

Keywords : *Water Flow Sensor,* Arduino MEGA 2560, *Module Bluetooth*