

## ABSTRACT

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*Refill drinking water depot in an industry processing raw water into drinking water for sale to consumers. Refill drinking water is in great demand in the community because it is affordable, more practical and can be drunk directly without having to be cooked again. Filling drinking water to gallons is a very easy process, just by turning on the water pump, then the water is flowed into gallons to fill water filled with gallons. Automatically prototype water systems on gallons. Determination of the volume of water at refill water depots, they still use a manual system that requires speed in turning off the switch that functions to open and close the water tap so that the gallon water fill according to the size of the gallon. This final project is an automation system for filling gallons of water at an IoT-based refill water depot. Because in filling gallons of water at refill water depots, they still use a manual system that requires speed in turning off the switch that functions to open and close the water tap so that the gallon water fills according to the size of the gallon. For testing the filling of water filling gallons in an empty condition to a full condition it takes 4.45 minutes to be fully filled, 19.04 liters of water are flowed. For the difference in filling time of 9 seconds to 16 seconds and for the distance the surface of the gallon will continue to decrease in number followed by filled water.*

*Keywords: SAP Gallon, Water, Manual, Automatic, IoT*