

## ABSTRACT

*One alternative to drinking water that can be consumed is alkaline water, alkaline water itself is water charged with negative ions that are alkaline and have a higher oxygen content compared to ordinary water, so it is very good for the health of the human body. Alkaline drinking water with a pH of 8-10 can be produced from the electrolysis process. Electrolysis of water produces two types of water, alkaline water containing hydrogen and acidic water. In the wide market is already available water ionizer tool that utilizes the process of electrolysis of water, but still with the process and manual control.*

*To meet the development of technology, innovation, and ease of use of water ionizer devices that will be designed equipped with Internet of Things systems that can later be controlled and monitored through mobile applications anytime and anywhere by users so as to improve ease of operation. The system is designed to control the ionization process through the Thingspeak server, so users do not have to bother to operate it manually. Furthermore, the system is equipped with monitoring features to monitor the condition of pH, temperature, and water capacity measured through sensors on the hardware that will be processed through the microcontroller and forwarded by the WiFi module ESP8266-01 into the server so that it can be displayed on the mobile application. The last feature offered is the display of notifications and data history from the water ionizer device. Design and manufacture of mobile applications utilizing the MIT App Inventor platform as a service provider based on the android operating system.*

**Keywords:** *thingspeak, internet of things, mit app inventor, water ionizer*