ABSTRACT

Humans living in this world need a liquid substance that can be useful for maintaining the body's immune system so that it is always in shape every day. The liquid referred to by the author here is water or mineral water which we drink every day to quench thirst and maintain a healthy body. Therefore, maintaining a pattern of drinking water every time is very important for every human being. Therefore, the author created a smart dispenser innovation to facilitate human needs to monitor and maintain their drinking patterns at all times.

Dispenser is a tool that can be used to place gallons of drinking water so that humans can more easily take drinking water from gallons of water to the glass that will be used. So far, dispensers generally do not have several features that can be used to make it easier for the owner to monitor the amount of drinking water that has been drunk every day. In this modern era, all the tools that will be used by humans to meet their needs have been modified to become more sophisticated with various features on it.

From the test results of the tools and sensors used, it is known that all smart dispenser tools and sensors can run well with accuracy values that are classified as feasible to use and can be connected to the *Firebase database*. In the network test, the average delay value of 169 ms was obtained based on the TIPHON standard, the value was categorized as "Good" and for the throughput test results, an average value of 4148 kbps was categorized as "Very Good" based on the TIPHON standard.

Keywords : *Database, Dispenser, Quality of Service, Internet of Things (IoT)*