

ABSTRACT

Currently the problem of awareness of drinking water is still lacking. Water is very important for human life. However, it is unfortunate that there are still many people who are less aware of the importance of drinking air for the body. With enough drinking water to make us avoid disease. Bottled drinking water is already widely used, but awareness of beverage intake is still quite low.

In this final project a smartdispenser application is created which functions to monitor and control the scope of offices to find out the awareness of drinking water consumption for daily needs. In the initial stage, the system design includes the workings of the system and the design of the interface or appearance of the application. Making an application using Android Studio software. Applications that have been made will then be linked to Firebase as a medium for data retrieval and transmission.

The test results show that the Smart Dispenser application can be integrated with Firebase. The software can monitor the dispenser by displaying the capacity of the gallon contents, as well as displaying historical data in the form of the amount of water needed by consumers per day from drinking drinking water in real time. Monitoring the water capacity of the dispenser can run with an average delay of 2.57 seconds. The data consumption used to upload data to send data on to the real time database is 1 Kb and 2 Kb of downloading data for each change in the capacity of the water dispenser gallon in the database.

Keywords: *IoT, Smartdispenser, Monitoring, Controlling, Android, Firebase*