

ABSTRACT

Internet of Things (IoT) is a concept that connects all devices to the internet and allows these devices to communicate with each other through the internet. At this time the implementation of IoT in integrated service post activities (posyandu) is very rare. Many posyandu experience difficulties when the inspection schedule takes place, namely equipment and services that still use conventional methods, causing the examination process to take quite a lot of time and it is difficult for parents of toddlers to monitor the health development of their toddlers when they are also busy with their work.

In this final project, a toddler monitoring system will be designed at an IoT- based posyandu. The design of the system starts from making sensors that measure the toddler's height, weight and temperature whose measurement data will be sent to the firestore database. The data that has been received will then be displayed on a website that can be easily accessed by parents, making it easier for parents to monitor the health of their toddlers. Parents of toddlers will also get a report on the results of the examination which will be sent via the WhatsApp application. So that even though they cannot accompany them, parents can still find out the results of their toddler's examination.

There are three testing parameters, namely usability testing, load testing and speed testing. The usability test got a score of 79.6, which is already getting results above the average and can be declared feasible to use. The load testing test shows that the website server is still very capable if there are 50 users using the website at the same time and none of the requests fail to run. In speed testing, it can be seen that it only takes a short time for the user to access the main menu or it only takes approximately 1.7 seconds to display the entire page on the user's main menu.

Keywords: *Toddler, Posyandu, Internet of Things, Monitoring*