ABSTRACT

In modern times, cameras are very commonly used tools both as a hobby and as a tool for professional photographers. But most people who have a camera or lens do not know how to care for, store, and provide treatment so that the quality of the camera remains the same and does not decrease. Dry Cabinet is a solution for storing cameras or lenses. However, in the existing Dry Cabinet, the lack of monitoring and controlling is still manual so that there are often errors or damage to the camera due to being late. So we need a website with an automatic system and notifications so that users know the condition of the dry cabinet.

From these problems, it is necessary to have a storage area capable of monitoring, controlling and sending notifications to users of the storage area in order to minimize the camera from being damaged and the quality remains good. The Realtime Database feature that Google Firebase has provided will be very useful, being able to see data in real time to see conditions in camera storage. In this final project, a system that is capable of monitoring and controlling temperature and humidity is made so that the camera or lens is not easily moldy, monitoring the intensity of dust in the storage area to avoid dust, and keep it safe when stored through the website. The data is taken in real time from the microcontroller device which will then be on the website page and send notifications to the user if the temperature and humidity exceeds or is less than the predetermined limits. By using Internet of Things technology. The website can be accessed anywhere as a user is connected to the internet.

From the test results of the dry cabinet website regarding the functionality and work system of the site, the results of the website are already running 100% well and in accordance with the initial design. With the development of dry cabinets and websites created, it will be easier for users to monitor and control dry cabinets for temperature and humidity indicators in dry cabinets, dust indicators, indicators for the number of cameras or lenses stored in dry cabinets, thermoelectric assistance and dehumidifiers, view data history on opening the dry cupboard door and getting a notification in the email for the admin for user activation and email notification users if the account has been activated. The result of the average delay obtained is 0.51 seconds. Based on the lighthouse testers obtained good and sufficient results on performance with a value of 97, accessibility with a value of 96, best practice with a value of 85 and SEO with a value of 89. Based on the test results obtained on these testers it can prove that the website is successfully implemented and integrated with database.