ABSTRACT

Toilet paper is widely used by the public for personal hygiene, one of which is to clean the genital area after defecating or urinating. That's why people often bring their own tissues because in some toilets there is currently insufficient supply of tissues and the management by the cleaning service is still manual so it is quite time-consuming. For example, checking the tissue in every toilet and in filling it. That's why the IoT-Based Automated Tissue System Design was created.

In this final project, an IOT-Based Automatic Tissue System has been designed which has a workflow with an infrared sensor as an input to the microcontroller and a DC motor used as an output for removing tissues.

The goal achieved in the preparation of this final project is the infrared sensor in the IOT-Based Automatic Tissue System Design as an object detector. When the infrared sensor detects an object, the infrared light will be reflected so that the DC motor moves so that the tissue comes out and vice versa. From the results of implementation and testing, automatic tissue can send data to the firebase as expected because it can know the condition of the tissue and know counter A and counter B. On testing the hardware functionality of the sensors and tools that have been made, it can be concluded that all functions are 100% running well properly so that the smart tissue application can monitor tissue and can be used easily by its users.

Keywords: *microcontroller, tissue automatic, counter.*