ABSTRACT

Indonesia is an archipelago with a tropical climate which has two season namely the dry season and the rainy season. Has a strong relationship between human immobility and the prevailing weather conditions. However, the rainy season often hampers human activities, so that the climate in Indonesia in the last 5 years often causes local rain in certain areas in Indonesia, including the city of Bandung and its surroundings in West Java province, especially in the Ciwastra area. The biggest challenge that can become an obstacle in configuring IoT is bridging the gap between the physical world and the information world and how to structure the communication network, because the network needed by IoT is very complex.

The final project that made is in the form of an application using a website information system to provide direct information about the weather conditions in the Ciwastra area using a rain sensor that is already IoT based and the data will be presented to the public via the website. Information on weather conditions whether it rains or not, this is very useful for people who want to travel to a certain place or area, especially for the Ciwastra area and its surroundings because monitoring of these two weather conditions is carried out in real time.

The results of the simulation and functionality testing show that all functions of the website system can function 100% and can be used as expected. Website performance gets a score of 76 based on an assessment from Google Lighthouse. This means that the weather monitoring website gets pretty good results from the Google Lighthouse assessment range. So that the website is comfortable to use.

Keywords: Internet Of Things, Sensor DHT11, Rainfall Sensor, website.