

ABSTRACT

The complex environment is the daily living environment of citizens. The complex environment is clean and healthy not only in the house but also outside the house, for example the complex garden. The garden complex besides its beauty is laid out, it is also worth noting the maintenance as an example of watering the garden that needs to be considered. The complex garden is a beautiful appearance that can create a cool and quiet residential environment.

With the design and implementation of the park watering information system in the garden of Sanggar Indah Banjaran Complex. This system can help the park watering process by monitoring and controlling equipment for watering via firebase realtime database. This website uses weather forecast information to be able to do watering if the weather is sunny and if the rainy weather website controls the tool not to do watering and soil moisture sensor is selected to know the soil moisture if the soil is moist enough then watering is not necessary and watering is also scheduled with a set date when scheduling. For weather forecast data obtained from the Open weather website through the API.

With the website information System can provide convenience for cleaning officers in Komplek to conduct monitoring and controlling the garden watering with the help of the weather forecast feature that can be from Open weather. From the test obtain there was a weather forecast provision with a direct state in the field of 95% of 20 tests and for the system functionality can run 100%. For delay consists of three IE manual control delay for the on button obtained an average delay of 4.098 second and the average delay button off of 2.881 seconds for the CBN provider then for the on button obtained an average delay of 6.763 seconds and the average delay button off of 4.582 seconds for the provider Three, for automatic control delay of 6.651 seconds for CBN provider and then for automatic control delay of 9.293 second for Three provider and for testing data usage needs of 2607.8 KB.

Keywords: *Weather Forecasts, Garden Watering, Open weather, Firebase.*