ABSTRACT

Weather condition in specific a region is one of the important information that is needed by the user. This is caused by unexpected change of weather as a consequence of global warming and climate change. One of this case is occurred at the southern bandung area especially Telkom University, which has an uncertain weather condition. This is caused by extreme temperature change and see level difference with surrounding region. Therefore, a monitoring system is designed to identify and analyze weather and temperature condition to support weather prediction on Telkom University area. This system is designed using DHT11 sensors, rain sensors, LDR sensors and BMP280 sensors in real-time at specific locations. This system used Soft Real-Time System (SRTS) concept. From the experiment, the result shows that temperature data variation between 22 – 38 and humidity between 10 – 70 % RH. This result is compared with weather data from several weather prediction application. Then data is sent and stored to database and displayed on web application so that user can view real-time wether condition. IP Camera is also installed with soft real-time system (SRTS) to monitor weather condition visually.

***Keywords**: Monitoring Weather Conditions and Temperatures, soft real-time system (SRTS), Database, IP Camera, Web application.*