ABSTRACT

The noise of motorized vehicles in the surrounding environment can interfere with user comfort and cause disruption in daily activities. Therefore, a tool that is able to detect noise in real-time and provide graphs of the noise level up to days to related parties and local residents who have the blynk application. This study implements a tool equipped with a sound sensor to detect noise in the surrounding environment. Noise data taken by the sensor will be processed using the ESP8266 microcontroller. After detecting noise that exceeds a certain level limit, ESP8266 will send data automatically through the blynk application. Tests are carried out directly around the environment to determine the noise situation, and measure the success of the detection made by the sensor. The results obtained have the highest average noise level with a measurement duration of 70,3 dB, this shows that the noise level for the South Bogor, Bogor, West Java areas still has standardization in accordance with government regulations.

Keywords: *Nosie, Sensors, Microcontrollers EPS826, Blynk*