ABSTRACT

Noise is an unwanted sound and can interfere with the comfort of the surroundings. The noise is usually expressed in units of dB (decibels). In the educational environment limits the index suggest that voice is around 55 dB. Usually the occurrence of noise are difficult to be known for sure, hence in this final assignment will be made a noise detection monitoring system that can find out where is the position as well as the accuracy of the source of the noise. This system will be using sound sensor Df Analog robot V2. Then the existence of a WiFi Shield allows systems to communicate with each other with the microcontroller so that it will show warning to the user through an application, for the determination of the direction of the source using the method of K-Nearest Neighbor (KNN). From the experiments, the user will be able to get a warning associated with the noise that occurs in an area at once with the precision position of the noise source that occurs with an average success rate of 70.56%.

Keywords: Noise Sources Detection