Abstract

Cigarette smoke contains many gases that are harmful to the body. Smoking is a bad habit that many people do and we often find people smoking in public places. Smoking habits carried out indoors can endanger people around. Therefore we need a system that can detect cigarette smoke. In the previous final project there was a detection system for cigarette smoke and insect repellent smoke. But in a room there may be smoke other than cigarette smoke and smoke from fires, for example LPG gas leak. So that in this final project a system can be detected to classify and classify cigarette smoke, fire smoke and LPG gas. This system uses sensors Mq-2, Mq-7 and Mq-135 to detect the presence of smoke and uses a naïve bayes method for classification of smoke types. When the sensor detects smoke and gas, the sensor will forward the data to Arduino, then the data will be sent and processed on the Thingspeak server and will produce smoke predictions. When the sensor detects smoke or gas, a command will be sent to Arduino to run the buzzer sound. The results of testing the smoke detection system and classifying smoke are expected to use the Naive Bayes method, namely with a range of accuracy values of 90% to 95%.

Keywords : ***Smoke, Naïve Bayes, Mq-2, Mq-7, Mq-135***