

CHAPTER 6

CONCLUSION

The following conclusions can be derived from the Monitoring of Air Quality Using a Fuzzy Algorithm project's findings:

1. 3 sensors are functional and can detect gas in accordance with the established parameters.
2. Using the results of the tests, the system can determine whether the surrounding air quality is good, medium, or dangerous, according to fuzzy logic. The LCD displays Good Quality with a green Led notification and the Buzzer is silent if the ambient air quality is good. The LCD displays Mid Quality with a yellow LED notification and a silent buzzer if the ambient air condition is moderate. The LCD indicates Bad Quality with a red LED indication and a buzzer sounds if the air condition is harmful.
3. The fuzzy logic technique is used in the category technique. The first data captured by the sensor is entered into each gas's threshold, which is divided into three categories: good, moderate, and dangerous. The detected data is then fuzzyfication, and the results are entered into the specified rules. The next step is the defuzzification process, which is followed by the membership output.

Add a wifi module so it may transmit results in real time to a web server or a mobile application, as a suggestion for further development.