IOT Air & Sound Pollution Monitoring System

Abstract:-

Air and sound pollution is a growing issue these days. It is necessary to monitor air quality and keep it under control for a better future and healthy living for all. Here we propose an air quality as well as sound pollution monitoring system that allows us to monitor and check live air quality as well as sound pollution in a particular areas through IOT. System uses air sensors to sense presence of harmful gases/compounds in the air and constantly transmit this data to microcontroller.

Also system keeps measuring sound level and reports it to the online server over IOT. The sensors interact with microcontroller which processes this data and transmits it over internet. This allows authorities to monitor air pollution in different areas and take action against it. Also authorities can keep a watch on the noise pollution near schools, hospitals and no honking areas, and if system detects air quality and noise issues it alerts authorities so they can take measures to control the issue.

Block Diagram:
Hardware Specifications
1. ATmega328P AVR MC - Buy ATmega328P Online
2. MQ 135 Sensor – Buy Air Quality Pollution Sensor Online
3. Mic Sensor - Buy Sound Sensor Online
4. ESP8266 Wifi Module – Buy Wifi Module Online
5. LCD’s – Buy LCD Online
6. Crystal Oscillator – Buy Crystal Oscillators Online
7. Resistors – Buy Resistors Online
8. Capacitors – Buy Capacitors Online
9. Transistors – Buy Transistors Online
10. Cables & Connectors – Buy Cables & Connectors Online
11. Diodes – Buy Diodes Online
12. PCB – Buy PCB & Breadboards Online
13. LED’s – Buy LED Online
14. Transformer/Adapter – Buy Transformers & Adapters Online
15. Push Button – Buy Buttons & Switches Online

Software Specifications:
- Arduino Compiler
- MC Programming Language: C