COLLEGE NAME: PRIYADARSHINI ENGINEERING COLLEGE

COLLEGE CODE : 5119

COURSE NAME: Internet Of Things (IOT)

GROUP NUMBER: 2

PROJECT TITLE: AIR QUALITY MEASUREMENT

PROJECT SUBMITTED TO: SKILL UP ONLINE

YEAR: 3rd

DEPARTMENT: ELECTRONICS AND COMMUNICATION ENGINEERING.

SEMESTER: 5th

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INNOVATION :

- Set up loT devices to measure air quality parameters like pollution levels and particulate matter.

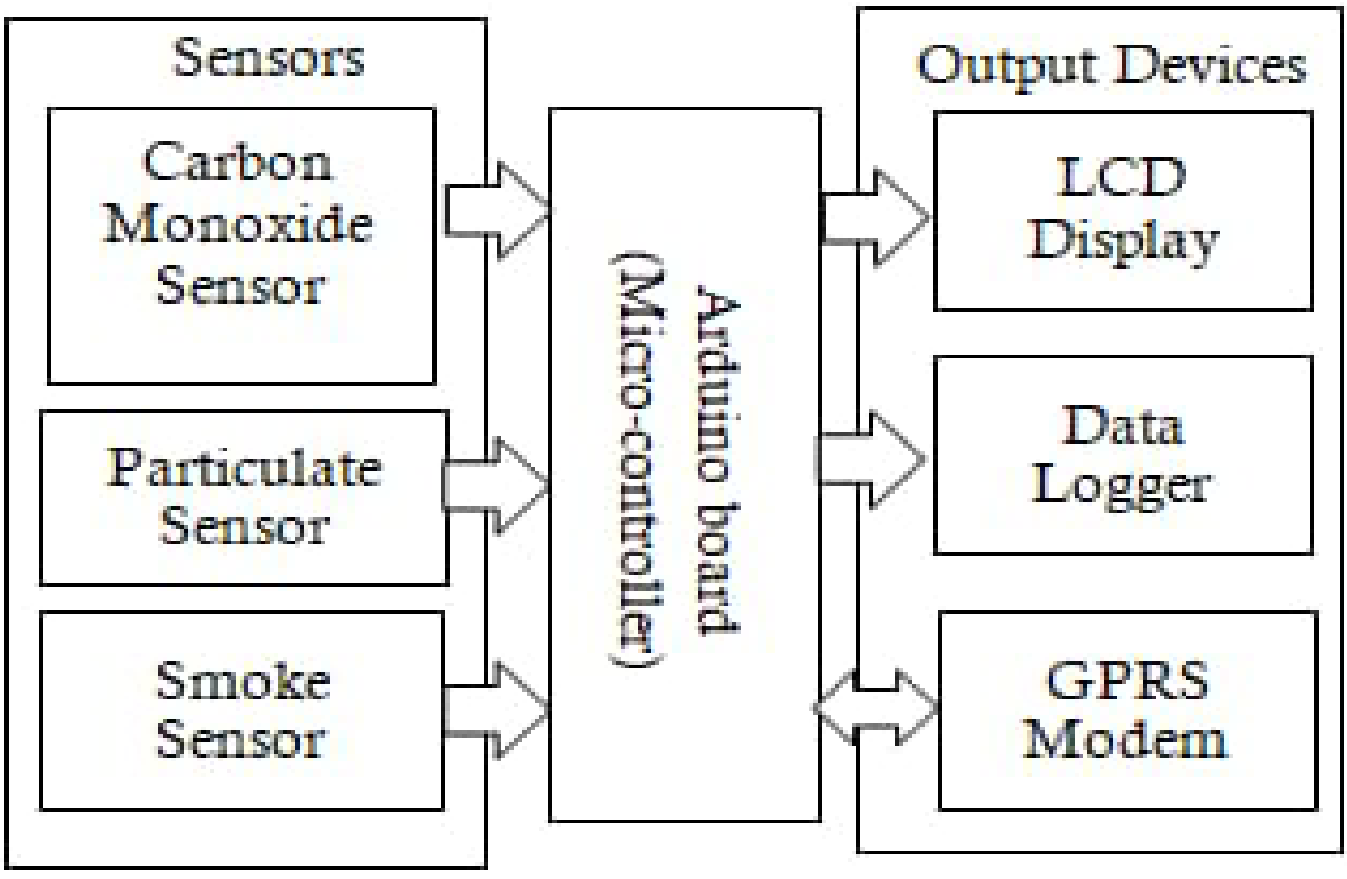
- This data can be made publicly available to raise awareness about air quality and its impact on public health.

- Use any air quality sensor (eg: VOC sensor) to monitor air pollution levels, particulate matters and various other parameters that define air quality.

- Connect these sensors to a processor such as Arduino or raspberry pi. Connect an esp8266 module to upload this data to cloud. Make this data publicly available.

- Create a blog to display this data along with visualizations such as graphs.

BLOCK DIAGRAM :



DISCRIPTION :

Air quality sensors:

- These sensors are used to measure the concentrations of different air pollutants, such as particulate matter (PM), ozone (03), nitrogen dioxide (NO2), and sulfur dioxide (SO2).

Data acquisition system:

- This system collects the data from the sensors and converts it into a digital format.

Data processing unit:

- This unit processes the data to calculate the air quality index (AQI). The AQI is a measure of the overall air quality, and it is used to communicate the air quality to the public.

Data storage and retrieval:

- This block stores the air quality data so that it can be analyzed and used for future planning.

Data visualization and reporting:

- This block visualizes the air quality data in a way that is easy to understand, and it generates reports that can be used by decision-makers.