PROJECT TITLE :AQM-IOT

PROJECT DEFINITION:

The air that we intake should be free from dust particles, infectious agents, and poisonous gases. To detect the quality of air and to give the parameters information to the public. IoT plays a crucial role in modern air quality management by providing real-time, data-driven insights that can lead to better decision-making and improved air quality for communities and the environment.

DESIGN THINKING:

Our project is to develop an IoT based air quality management system that integrates hardware (IoT sensors) , software(mobile app or a website platform), and collection if data to measure, and to raise public awareness, and health impact.

IoT sensors to detect air quality:

An air quality sensor, often referred to as an air quality monitor or AQ sensor, is a device designed to measure and provide data on various air quality parameters to assess the level of pollution and the overall quality of the air in a specific environment. These sensors are essential tools for monitoring and managing air quality, especially in urban areas and industrial settings.

Process:

Sensing element-> Microcontroller-> Microprocessor-> Data Processing unit->Communication interface-> Power supply-> Enclosure->Heating element->Calibrarion mechanism->Memory->user interface-> data storage.

Create an app:

This app allows the users to view the parameters of air like moisture content , dust particles present,etc. So that they know how the air is polluted and takes measures according to it.

Create Public Awareness:

We can create public awareness by conducting events in schools and apartments so that they can know the cause and take measures according to it.

Regulatory Compliance:

Collabrate with local authorities and regulatory agencies to ensure the system compiles with noise pollution regulation.