Project Title :AQM –IoT

PHASE 1 : Project Definition and Design Thinking

Problem :

   In the nature air contains more dust particles it causes health issues ,environment problems and more . So we need to know the quality of the air in atmosphere.

Project Definition:

   The project involves setting up IoT devices to measure air quality parameters like temperature,humidity,CO2,O2 ,PM2.5,PM 10 and more. And to make the data publicly available for raising awareness about air quality an its impact on public health.The air quality system provides real time air quality information to the public

Design Thinking:

1. Project Objectives :
   i)   It measures air pollution using sensors.
   ii) Sent data to the internet for analysis.
   iii) Give real time information about air quality.
2) IoT Devices designs :
   a) Sensors that detect things like dust and harmful gases in the air. The sensors like gas sensors and temperature sensors.
   b) Select a microcontroller , like Arduino or ESP32.Ensure it has enough input pins for sensors and supports the chosen communication method.
3) Data sharing Platform :
   a) The online storage where the data is kept and analysed. Using platform like AWS IoT or Google cloud IoT.
4) Integration Approach ;
   a) Depending on the chosen data sharing platform to configure IoT devices to communicate with that platform specifically.
   b) Integration might also involves setting up SDKs or libraries specific to the platform on IoT devices to streamline communication.