**AIR QUALITY MONITORING.**

**Air quality monitoring refers to continuous measurement of specific air pollutants also known as “criteria air pollutants”.**

**PROJECT OBJECTIVE**

**We aim to install , maintain a network of air quality sensors in key location and continuously monitor ,record air pollutants such as CO,NO2,SO2 and ozone using sensors. The objective is to provide real time data on air quality parameters with high accuracy and reliability.**

**DESIGN THINKING:**

**We chose to use MQ135 Air quality sensor which is best to detect most harmful gases and can measure their amount accurately.MQ135 is a form of VCO(Volatile organic compound sensor) air quality sensor.It is used to measure and detect a wide range of organic gases and vapours that can be harmful to the air quality.**

**The MQ135 sensor can sense NH3,NOx,alcohol,benzene,smoke,CO2&other harmful gases.**

**When we connect it to Arduino then it will sense the gases and we will get the pollution level in PPM. MQ135 gas sensor gives the output in the form of voltage levels and we need to convert it into ppm.**

**Sensor was giving us value of 90 when there was no gas near it and the safe level of air quality is 350ppm and it should not exceed 1000ppm.When it exceeds the limit of 1000ppm,then it starts to cause headaches,sleepiness etc.**

**When the value will be less than 1000ppm,then the webpage will display “fresh air”.Whenever the value will increase 1000ppm then the webpage will display”poor air,open windows”.if it increase 2000 then the webpage will display”danger!move to fresh air”.**

**DATA SHARING PLATFORM:**

**We can establish a centralized data base to collect and store air quality data. And then we can develope a user friendly web page to access real time data.**