**Project Title:** Air Quality Monitoring

**Phase 1: Problem Definition and Design Thinking**

In this part you will need to understand the problem statement and create a document on what have you understood and how will you proceed ahead with solving the problem. Please think on a design and present in form of a document.

**Problem Definition:**

The project involves delving into Air Quality Monitoring. The objective is to extract valuable insights from extensive datasets, ranging from climate trends to social patterns. The project includes designing the analysis process, setting up quality testing, analysis of collected data, and the quality.

**Design Thinking:**

1. **Analysis of collected data:** The data of all the gas sensors used for measuring gases in the air is fed to the microcontroller for analysis, and it results in the Pollution level in PPM (parts per million).
2. **Monitoring System components:** IoT-based air pollution monitoring systems comprise several components that work together to collect and analyze air quality data.
3. **Air Quality Assessments:** Air quality impact assessment is an method to measure the relative concentration of atmospheric pollutants at given time and location.
4. **Quality Control**: It allows the measurement , operation and predictive analysis of the air quality.
5. **Quality Assurance:** Measurements of ambient air pollutant concentrations can be costly to conduct and results can affect significant decisions with serious economic or ecological implications.