

Air Quality Monitoring System

Phase 1: Problem Definition and Design Thinking

The Air quality monitoring system is a comprehensive environmental project designed to monitor and manage air quality in a specific geographic area.

PROBLEM DEFINITION:

- Develop a robust and reliable air quality monitoring infrastructure.
- Continuously monitor various air pollutants and meteorological parameters.
- Provide real time and historical air quality data.
- Implement data visualization and reporting tools.
- Support decision making processes for pollution control and public health.
- Immediate alerts to notify industrial sector workers of any hazardous gas releases into the environment.
- Aids the government in monitoring the cumulative greenhouse gas emissions from individuals or organizations.

Design Thinking:

- Determine appropriate sensor options for the measurement of air quality and the quantification of air pollutant levels.
- Create a user-friendly web application or mobile app that enables individuals or organizations to monitor and record air pollution levels effectively.
- The air pollutants data will be promptly updated in the database.
- The gathered data will be transmitted to the cloud using either a Wi-Fi or cellular network connection.
- Incorporate a notification system that warns users when there is a combination of air pollutants.
- Send real-time alerts to users within a specific area in the event of dangerous gas emissions in the environment.