

PROBLEM STATEMENT

Air pollution is one of environmental issues that cannot be ignored. Inhaling pollutants for a long time causes damages in human health. Traditional air quality monitoring methods, such as building air quality monitoring stations, are typically expensive. This project is suitable for air quality monitoring in real time. Design a tool which will sense quality of air and display it in the form of percentage, Sense how much carbon mono-oxide(CO) is present in air and display in the form of percentage, Sense the temperature and display it in degree celcius.

DESIGN THINKING

SCOPE

In the future work, we can modify the system to notify a user about the air quality when it reaches beyond when it reaches beyond a permissible level through SMS or APP. Notification, furthermore, the sensors in the system can be calibrated more so that we can get more accurate

and get data for more harmful gases such as Ammonia, oxides of nitrogen, etc. Our work can demonstrate vast opportunities to work on the device, on the app and also on the field using the device that we have worked with. The device can be used any time efficiently in different locations of a city and then research with the achieved data for that particular area in that city. The device can be updated with additional sensors that can sense data from the existence of other gases such as O₂ and H₂. These gases will provide the condition of the atmosphere and authority can take into further decisions accordingly. The sensors that we have been worked with can also be reset according to most recent time update. The android app which we have developed for turning on and off the device can be updated with newer features by implementing necessary codes.

MOTIVATION

As seen in the previous overview to the current IoT, most IoT applications in domain specific or application specific solutions. The architectures of these IoT systems are split and cannot correlate and integrate the data from different storage tower, these isolated IoT keys use private protocols and cause much difficulties in information sharing, technology multiplexing,