# Phase 1: Problem Definition and Design Thinking

The scope of this document is to identify the problem and find solution for public restroom users and restroom management to receive real time Environmental Data.

## Problem Definition:

It has been researched and found that there has been the following issues with public restroom management. The issues or problems are listed below:

* The restroom management did not receive any information or updates on the environmental data of the public toilet.
* Traditional public toilets often use excessive energy for lighting, ventilation, and heating.
* Inefficient cleaning schedules lead to unsanitary conditions and wasted resources.
* This also has resulted in the failure of the public toilet management.
* This has resulted in and overall low satisfaction of users.

# Design Thinking:

Having understood the above problem. We would designing a solution which would be able to solve the same.

* An IoT based solution could immediately resolve the above issue
* We would need to identify the right Digital Humidity, photosensor and Temperature Sesnsor, for which we would need perform extensive research on Original Equipment Manufacturers.
* The requirment of the IoT solution needs to be able to communicate to a public toilet management and the workers.
* Hence we would need internet connectivity and communication module

NOTE:

File Naming Convention: IoT\_Phase1