

Smart public restroom

Phase 1: problem definition and design thinking

Project definition:

The project aims to enhance public restroom management by installing IoT sensors to monitor occupancy and maintenance needs. The goal is to provide real-time data on restroom availability and cleanliness to the public through a platform or mobile app. This project includes defining objectives, designing the IoT sensor system, developing the restroom information platform, and integrating them using IoT technology and Python.

Design Thinking:

Project Objectives: Define objectives such as real-time restroom availability information, cleanliness monitoring, improved user experience, and efficient restroom.

IoT Sensor Design: Plan the deployment of IoT sensors (e.g., occupancy sensors, cleanliness sensors) in public restrooms.

Real-Time Transit Information Platform: Design a web-based platform and mobile app to display real-time restroom availability and cleanliness data.

Integration Approach: Determine how IoT sensors will send data to the restroom information platform.

Conclusion:

This project concludes defining objectives, designing the IoT sensor system, developing the restroom information platform, and integrating them using IoT technology and Python