## SMART PUBLIC RESTROOM USING IOT

- **1.Sensors and IoT Devices:** Install various sensors in the restroom to collect data. For instance, occupancy sensors to determine if stalls are in use, air quality sensors, and water usage sensors.
- **2.Connectivity**: Ensure that these sensors are connected to the internet through a secure network. This may involve using Wi-Fi, Bluetooth, or other IoT communication protocols.
- **3.Data Collection:** Collect data from the sensors in real-time. This data can include information on restroom occupancy, temperature, humidity, and more.
- **4.Data Processing:** Process the collected data to extract meaningful information. For instance, you can use algorithms to identify peak restroom usage times or detect issues like water leaks.
- **5.Data Sharing Platform:** Develop a platform to store and share this data. Consider using cloud services for data storage and APIs for data sharing.
- **6.Maintenance and Monitoring:** Regularly monitor the system for sensor malfunctions or data inaccuracies. Implement a maintenance protocol for quick response to issues.