

# Smart public restroom

## INNOVATION:

- 1.Implement sensors and robotics to clean and sanitize restroom facilities automatically, ensuring a consistently clean environment.
- 2.Occupancy Monitoring: Use sensors to detect restroom occupancy and display real-time availability information on an app or digital signs, reducing wait times.
- 3.Water and Energy Efficiency: Install smart fixtures that use water and energy efficiently, with features like automatic faucets and LED lighting that adjusts based on occupancy.
- 4.Touchless Operation: Incorporate touchless entry, flush, and handwashing systems to minimize contact with surfaces and promote hygiene.
- 5.Waste Management: Implement smart waste bins that monitor fill levels and schedule waste collection when needed, reducing maintenance costs.
- 6.Accessibility Features: Ensure inclusivity with features like voice-activated controls, Braille signage, and adjustable fixtures for people with disabilities.
- 7.Sustainability: Integrate renewable energy sources like solar panels, and use eco-friendly materials and water-saving technologies to minimize environmental impact.
- 8.Maintenance Alerts: Implement predictive maintenance systems that send alerts when repairs or restocking are needed to ensure a seamless experience for users.
- 9.Hygiene Ratings: Display real-time hygiene ratings and user reviews for public restrooms to help people make informed choices.
- 10.Security and Safety: Install surveillance cameras for security and emergency buttons to ensure user safety.

These innovations can enhance the overall user experience, improve hygiene, and contribute to sustainability efforts in public restroom.