GANESH COLLEGE OF ENGINEERING

SMART PUBLIC RESTROOM

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INTRODUCTION

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- Intelligent toilet, public restroom and smart toilet restroom designed in ITALY by our partner TOILITECH.

- Our upmost design offers almost any budget from the basic manual specification to our powerful PLUS and SMART technology fully automated, smart restroom technology.

ABSTRACT

- As the world population is increasing the safety and health issues is one of most alarming sectors.

- Smart public sanitation system for health safety.

- We are automatically day and night light control system

- In an addition we also used and water level indicator to measure the water level

- For emergency situation user an emergency exit button have used all output operations system

- Smart sanitation system to improve human behaviour using flush system and reduce toilet related diseases.

- This project has been designed with experimental methodology to fulfill the vision of substance world from third world countries.

- Smart revolutionary invent to ensure the health safety in public sanitation.

Rest room

MODEL

Smart public toilet solution of Dusun smart IoT gateway

- Smart sensors: Install smart sensors in public toilets, such as temperature sensors, humidity sensors, gas sensors.

- Monitor the environmental conditions of public toilets in real time, including temperature, humidity gas, concentration etc.

- Intelligent Controller: The basis of the intelligent gateway intelligent Controller.

- Ventilation and other facilities of the public toilet to improve the comfort and energy saving effect of the public toilet.

Smart public toilet can be realized by referring to the gateway

▶ Automatic induction : smart public toilet products solutions can realize automatic induction flushing hand washing, lighting and other functions without manual operation , saving time and energy

▶ Environmental monitoring: smart public toilet products solutions can monitor the temperature, humidity, odor and other environmental parameters in the public toilet.

▶ Smart cleaning: smart public toilet product solutions can realize smart cleaning.

▶ Seurity monitoring: smart public toilet product solutions can understand user habits and needs through data collection and analysis.

AUTOMATIC induction clean

MARKETING DESIGN

- One device even features an "anus camera" that take a photo from below for identifications.

- something that has been described as the "polar opposites of facial recognition".

- A disease – detecting precision health toilet can sense multiple sign of illness through automatically urine and stool analysis.

- Government officials in China were so exasperated by the volume of theft a particular item from one public bathroom

- They resorted bro extreme measures.

- In 2017 facial recognition software in the rest room at the temple.

OUTDOOR MODELS

OUTDOOR MODELS

Smart Technology Model

SMART TECHNOLOGY MODELS

SMART PUBLIC RESTROOM FEATURES

▶ A operate   pre& post flush.

▶ Periodic automatic power spary cleaning.

▶ Light inside operated automatically.

▶ IoT enabled panel usage status communication.

FEATURES

Smart Public Toilet

Sanitary pad vending machines

The Future of Smart Restroom Technology

- Future of smart restroom technology looks promising, with continuous advancements and innovations on the horizon. Here are some key trends that are shaping the future of smart restrooms:

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- AI-powered Systems: Artificial Intelligence (AI) is expected to play a significant role in the evolution of smart restrooms. AI algorithms can analyze complex data patterns, predict usage trends, and optimize resource allocation. AI-powered systems can also enhance user experience by personalizing settings based on individual preferences.

Integration with Smart Buildings

- Smart restrooms are increasingly being integrated into larger smart building ecosystems

- This integration allows for seamless communication and coordination between different building management systems, such as lighting, HVAC, and access control.

- By leveraging the power of interconnected systems, smart buildings can optimize resource utilization and provide a holistic user experience.

SMART PUBLIC RESTROOM IN MQTT PROTOCOL

▶ The study focuses on saving clear water from the use of an automatic usinal flushing system in a toilet.

▶ The system uses MQTT as an under lying communication protocol

▶ The protocol is used in collecting ,controlling , commanding and debugging the system .

SMART PUBLIC RESTROOM IN BEECEPTOR COLUD

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             s/bathroom/dribbble-animation.gif)
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ADVANTAGES

- Smart restroom solutions offer the desired adaptability and flexibility.

- The modular construction of restroom cubicles allows for easy reconfiguration, ensuring efficient space utilization.

- This versatility makes restroom designs future-proof, enabling optimization of facilities according to changing demands.

CONCLUSION

- Smart restroom technology is transforming the way we experience public and private restrooms

- With features like occupancy sensors, odor detection, and supply level monitoring, smart restrooms enhance hygiene, efficiency, and user satisfaction.

- The implementation of smart restroom management systems and monitoring systems streamlines operations, optimizes resource allocation, and ensures a safe and pleasant restroom experience.

Thank you