



**JAI SHRIRAM ENGINEERING COLLEGE**

**TIRUPPUR – 638 660**

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai  
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**DEPARTMENT OF  
ELECTRONICS AND COMMUNICATION ENGINEERING**

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**Internet of Things  
Group 3**

**Phase 2 - Project Submission**

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**YEAR : III**

# Smart Public Restroom

## Innovation:

- ✓ The Smart public restroom has lots of innovative thoughts. In our project we include three main ideas. They are
  - Air quality monitoring.
  - Automatic flusher.
  - User availability.

## Air Quality Monitoring:

- ✓ If any odour is present in the restroom, it is detected by the airquality sensor.
- ✓ It gives information to the arduino, then the arduino switch ON the fragrance in the restroom.
- ✓ The fragrance remove the odour and give fresh feel for next one.

## Automatic Flusher:

- ✓ After every use, the flush automatically turn ON for a minute and it turn OFF.
- ✓ It is done by using ultrasonic sensor behind the toilet.
- ✓ Ultrasonic sensor measure the distance of the person from the toilet and when reach the threshold distance the flush will turn ON.

## User Availability:

- ✓ In this feature the presence of the user is detected by Ultrasonic sensor.
- ✓ The Ultrasonic sensor detects the person at a specific distance from the door.
- ✓ If the user is present there is a red indication in the entrance and in the absence there is a green indication for showing the availability of the restroom.