



JAI SHIRIRAM ENGINEERING COLLEGE

TIRUPPUR – 638 660

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
Recognized by UGC & Accredited by NAAC and NBA (CSE and ECE)



**DEPARTMENT OF
ELECTRONICS AND COMMUNICATION ENGINEERING**

IBM - Naan Mudhalvan

Internet of Things

Group 3

Phase 2 - Project Submission

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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.