

RefreshMate

Automated air renewal and air fresher system

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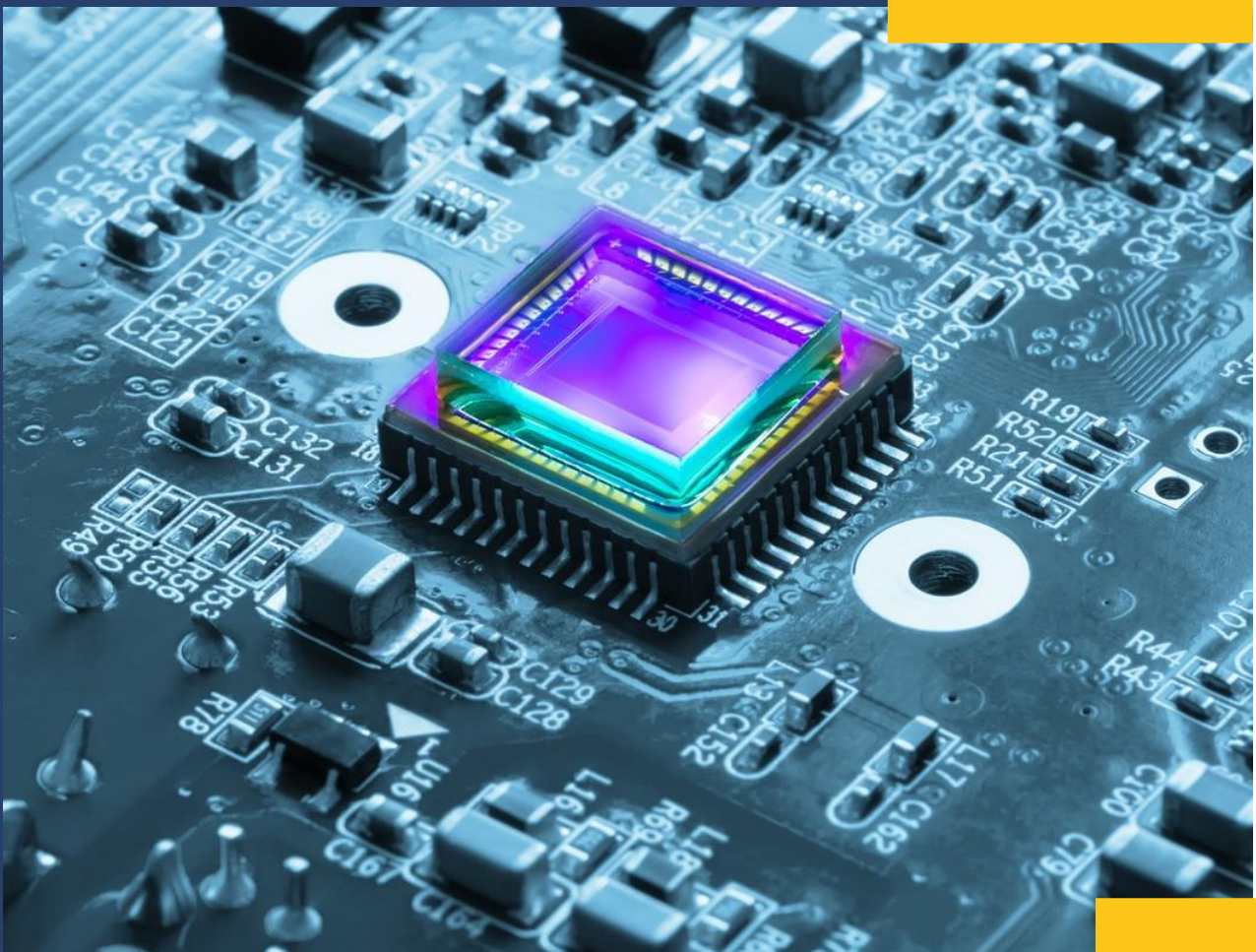
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INTRODUCTION

The proposed design project aims to develop an automated air renewer and air fresher system for public toilets and washrooms. The system will be designed to improve the air quality inside public toilets by automatically detecting and eliminating unpleasant odors. The system will also work to keep the air fresh and pleasant by continuously circulating fresh air. Our suggest system will be easy to install and operate, and will require minimal maintenance. This project aims to enhance the overall user experience in public toilets and promote better hygiene practices.

OBJECTIVES

- ♦ The proposed system will be scalable and can be installed in different types of public toilets, including schools, universities, shopping malls, train stations, and other public areas with high foot traffic.
- ♦ The implementation of this proposed design project will provide numerous benefits, including improved air quality, better hygiene, and enhanced user experience for public toilet users.
- ♦ The system will be powered by electricity and will be designed to consume minimal energy, making it cost-effective and environmentally friendly.

METHODOLOGY

1. Install a gas sensor in the public space to monitor the air quality. The gas sensor should be able to detect common pollutants, such as ammonia, carbon dioxide, alcohol, Benzene, smoke and particulate matter.
2. Set the gas sensor to monitor the air quality at regular intervals. This will ensure that any changes in the air quality are detected quickly and automatically.
3. When the gas sensor detects a decrease in air quality, activate a system that recycles fresh air throughout the public space. This is done using a exhaust fan that draws in fresh air from outside and circulates it throughout the space.
4. Once the air has been refreshed, release an air freshener to provide a pleasant aroma. Choose an air freshener that is free from harmful chemicals and has a scent that is appropriate for the public space.

CONCLUSION

Our proposal has a sample product that is built and is suitable for small-sized bathrooms. Similar methodology can be used for larger public bathrooms, but the unit's capacity must be sufficiently increased, and a pressurized air freshener system must be implemented.

Overall, we believe that this project has the potential to greatly benefit both individuals and communities, and we look forward to exploring its implementation in greater detail.