

## **1-Project Title: SanID - The Sanitizer Integrated ID Card**

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Class: IX B

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### **2-ORIGIN/GENESIS OF THE IDEA:**

After COVID-19 there is a risk and concern of child health in social community. School is such a social community in which children spent a lot of time. So in this regard SanID is an innovative solution designed to seamlessly integrate hygiene practices into daily routines, especially in environments like schools where the spread of germs is a concern. The project aims to create an ID card with a built-in sanitizer dispenser, ensuring that students, teachers, and staff always have easy access to hand sanitizer. This project aligns with the ongoing need to maintain hygiene standards, especially in the wake of global health concerns.

### **3-BACKGROUND: SanID: A Blend of Safety and Convenience**

In response to the ongoing global health challenges, Rabab Zaynab, a student of class IX B at KV No.4 Delhi Cantt, has designed an innovative project called SanID. The idea behind SanID is to integrate hygiene and identification into a single, portable device. SanID combines an ID card holder with a built-in sanitizer dispenser, ensuring that students and professionals have easy access to hand sanitization at all times. This innovation not only encourages frequent hand hygiene but also reduces the risk of losing or misplacing a sanitizer bottle. By merging two essential items into one, SanID promotes health safety without compromising on convenience, making it especially relevant in settings like schools and offices where both identification and hygiene are critical. Rabab's project reflects her keen awareness of contemporary issues and her drive to create practical solutions that can be easily adopted in everyday life.

**4.OBJECTIVES: (i).**The primary objective of SanID is to promote consistent hand hygiene by making sanitizers readily available and conveniently accessible throughout the day.

**(ii).**By integrating a small, refillable sanitizer compartment into an ID card, this project ensures that students and staff can easily sanitize their hands before meals, after using shared resources, or whenever necessary.

**5. RELEVANCE OF THE PROPOSAL TO SOCIETY:** The SanID project is highly relevant as it addresses the ongoing need for hygiene and safety in schools. By integrating a sanitizer with an ID card, this innovative solution ensures that students have easy access to hand sanitization throughout the day, reducing the spread of germs and illnesses. It's a practical, cost-effective approach that promotes health consciousness among students while aligning with current health guidelines. For Rabab Zaynab, a Class IX B student at KV No.4 Delhi Cantt, this project reflects creativity and a proactive response to a critical issue in school environments.

**6. SCIENTIFIC PRINCIPLE :**The SanID project integrates principles from fluid dynamics and microbiology. The design ensures easy access to sanitizer via a small, attached reservoir, utilizing capillary action or a mini-pump for controlled dispensing. Materials science principles ensure the sanitizer container is lightweight, leak-proof, and durable. The sanitizer combats microbial transmission through alcohol-based solutions, which disrupt the lipid membranes of pathogens. This innovation aligns with public health guidelines, emphasizing hygiene and reducing contamination risks in shared spaces. The compact design encourages frequent use, promoting a safer environment, especially in school settings.

## 7. RESEARCH METHODS:

### (i). Survey:

**Objective:** Understand the need and preferences of potential users (e.g., students, teachers, and school staff).

**Participants:** Students, teachers and staff at KV No.4 Delhi Cantt.

**Output:** Data on the frequency of sanitizer use, preferred methods, and potential interest in "SanID"

### (ii) FIELD TESTING:

**Objective:** Evaluate the prototype in a real-world setting.

**Participants:** A small group of students and staff using the "SanID" during school hours.

**Output:** Feedback on usability, durability, and any design improvements needed.

## 8. TIME LINE:

S.N	MONTH	WOK TO BE UNDERTAKEN	WORK TO BE COMPLETED
1	3	24-08-2024	

## 9. PRACTICAL APPLICATION:

SanID, a sanitizer integrated with an ID card, offers practical scientific benefits, particularly in maintaining hygiene in public spaces like schools. This innovation ensures that students have easy access to hand sanitization throughout the day, reducing the risk of spreading infections, especially during flu seasons or pandemics. The compact design encourages regular use, fostering better hygiene habits among students. Additionally, it can be customized to include features like contactless dispensing, making it not only convenient but also a step forward in the adoption of smart hygiene practices in educational institutions.

## **10. LEARNING BY SCIENTIFIC APPROACH :**

The SanID project, created by Rabab Zaynab of Class IX B, KV No.4 Delhi Cantt, exemplifies the scientific approach to problem-solving through innovation. By combining a sanitizer dispenser with an ID card, Rabab addresses the critical need for hygiene in schools. This project demonstrates her understanding of germ transmission and the importance of accessibility to sanitizers. Through observation, hypothesis, and experimentation, Rabab has developed a practical solution that promotes health and safety, embodying the principles of scientific inquiry and innovation in everyday life. This project is a testament to the power of creative thinking in solving real-world problems.

## **11. CONCLUSION:**

In conclusion, SanID, an innovative project developed by Rabab Zaynab of Class IX B at KV No.4 Delhi Cantt, addresses the critical need for hygiene in schools and public places. By integrating a sanitizer with an ID card, SanID offers a convenient, portable solution for maintaining hand cleanliness, especially in times of health crises. This project not only promotes personal hygiene but also encourages a culture of safety and responsibility among students. SanID is a practical, user-friendly innovation that holds the potential for widespread impact in enhancing public health.

## **12. REFERENCES:**

- (i) google
- (ii) News papers
- (iii) Microbiology books