A Project Report on

MIT CLEANING DEPARTMENT

Submitted by

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Under the guidance of

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In partial fulfilment of the award of Bachelor of Technology in Computer Science and Engineering

Department of Computer Science and Engineering

Maharashtra Institute of Technology,

Chhatrapati Sambhajinagar (Aurangabad) (M.S)

[2024-25]

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DECLARATION

We declare that this written submission represents our ideas in our own words and where others ideas or words have been included; We have adequately cited and referenced the original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

Place: Chhatrapati Sambhajinagar (Aurangabad)

Date:

Signature and Name of student/s

Shaikh Ismail Sardar

Nilesh Sonawane

CERTIFICATE

This is to certify that the Community Engagement Project report entitled**“ MIT CLEANING DEPARTMENT”** submitted by **Mr. Nilesh Sonawane, Mr. Ismail Shaikh**is the bonafied work completed under my supervision and guidance in partial fulfilment for the award ofBachelor of Technology in Computer Science and Engineering Maharashtra Institute of Technology under Dr. Babasaheb Ambedkar Marathwada University, ChhatrapatiSambhajinagar (Aurangabad) (M.S.).

Place: Chhatrapati Sambhajinagar (Aurangabad)

Date:

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Thank you all for your support and contributions to this project. Prof. Dr. Smita Kasar, Head of Department

Prof. Dr. N. G. Patil, Director, Maharashtra Institute of Technology, Chhatrapati Sambhajinagar (Aurangabad) }

Signed by the Student/s

Shaikh Ismail Sardar

Nilesh Sonawane

ABSTRACT

The "MIT Cleaning Staff Management Web Application" is designed to bridge the gap between the cleaning staff, administration, and students at MIT, ensuring a cleaner, more hygienic, and well-maintained campus environment. This web-based platform facilitates efficient communication, task management, and performance monitoring, improving the overall cleanliness and maintenance of MIT's facilities.

The application is structured around two main user types: cleaning staff and students. For cleaning staff, it provides a streamlined interface to receive and manage their assigned cleaning tasks, check schedules, mark tasks as complete, and communicate with supervisors if any issues arise. The cleaning staff can also log their progress and report any supply shortages or maintenance needs.

For students, the application offers a feedback system where they can report cleanliness issues, rate the quality of cleaning services, and suggest improvements. This allows students to actively participate in maintaining a clean environment by providing direct input to the administration and cleaning staff.

Administrators or supervisors have a centralized dashboard where they can manage staff schedules, track the completion of cleaning tasks in real-time, and monitor feedback from students. This feature enhances the accountability and efficiency of the cleaning operations, ensuring all areas of the campus are regularly cleaned and maintained to a high standard.

Overall, the MIT Cleaning Staff Management Web Application provides a dynamic platform for fostering collaboration between students, staff, and administration, ensuring a cleaner, more organized campus while improving communication, transparency, and accountability across all levels.

1.**INTRODUCTION**

1.1 Motivation

At first our guid Prof. Bharati Gurav mam tell us the all introduction about MCD i.e building a Motivating a cleaning department involves acknowledging the essential role that team members play in maintaining a clean, safe, and welcoming environment. Here are some practical ways to foster motivation in the cleaning department: wowhether it's completing a large project, meeting deadlines, or just consistently doing an excellent job. Recognitions can be as simple as thank-you notes, shout-outs in meetings, or small rewards.

1.2 Problem Statement

Maintaining a clean and hygienic campus is a critical aspect of the overall student and staff experience at MIT. However, managing the cleaning and maintenance operations across a large campus can be challenging due to the lack of efficient communication, task tracking, and performance monitoring systems between the cleaning staff, administrators, and students. Existing manual processes often lead to delays in task assignments, inconsistent cleaning standards, and a lack of transparency in the maintenance activities.

Furthermore, students and staff may face difficulties in reporting cleanliness issues or providing feedback, leading to unresolved concerns and a decline in the quality of campus facilities. The absence of a centralized platform for tracking cleaning schedules, monitoring staff performance, and gathering student feedback complicates the management of cleaning tasks and undermines the overall cleanliness of the campus.

1.3 Objectives

1. Maintain High Standards of Cleanliness:
2. Promote Health and Safety:
3. Ensure Efficient Use of Resources:
4. Support Environmental Sustainability:
5. Provide a Positive Student Experience
6. Track and Improve Performance:

1.4. Scope and Limitations

Scope :

1. Routine Cleaning Tasks: Includes daily, weekly, and monthly cleaning tasks such as sweeping, mopping, dusting, vacuuming, and sanitizing surfaces in all designated areas (offices, restrooms, hallways, public areas, etc.).

2. Specialized Cleaning: Handling specific requirements, such as deep cleaning, disinfecting high-touch areas, carpet cleaning, and sanitizing equipment in areas that need it more frequently (e.g., restrooms, kitchens).

3. Waste Management: Collecting, sorting, and disposing of waste in alignment with the organization's recycling and waste disposal policies.

4. Maintaining Supply Inventory: Ensuring that cleaning supplies, tools, and equipment are available and well-maintained, ordering additional supplies as needed.

5. Adherence to Health and Safety Standards: Following protocols for safe cleaning methods, appropriate use of cleaning chemicals, and maintaining safe work environments.

6. Support During Events: Assisting with event preparations and post-event clean-ups, including setting up or removing seating arrangements, waste management, and ensuring cleanliness in high-traffic areas.

7. Inspection and Reporting: Conducting regular cleanliness and maintenance inspections, identifying areas that need repair, and reporting issues such as plumbing problems, broken fixtures, or pest concerns.

8. Customer Service Support: Addressing immediate cleaning requests and complaints, such as responding to spills or accidental messes in a timely manner..

Limitations :

1. Limited Scope of Maintenance Repairs: Cleaning staff may report maintenance issues (e.g.,
2. broken fixtures, electrical issues) but are not responsible for repairs that require technical or specialized skills.
3. Restricted Access Areas: Some areas, such as high-security zones, equipment rooms, or
4. sensitive data rooms, may have restricted access, and cleaning staff may require additional clearance or supervision to clean these spaces.

3. Budget and Resource Constraints: The cleaning department operates within a set budget,

which limits the ability to purchase new equipment, high-cost cleaning supplies, or undertake

major projects without approval.

5. Specialized Cleaning Requirements: Certain spaces, such as medical or laboratory facilities,
6. may have stringent cleaning standards that require specialized training and equipment
7. outside the regular capabilities of the department.

5. Physical Limitations: Large-scale cleaning tasks (e.g., exterior window cleaning for

high-rise buildings) may require professional contractors, specialized equipment, or tools

that the cleaning department may not have access to.

6. Time Constraints: Limited hours and staffing may restrict the frequency of cleaning or

delay the ability to respond to non-urgent cleaning requests immediately.

8. Environmental and Chemical Restrictions: Compliance with environmental policies or
9. chemical safety regulations may limit the types of cleaning agents the department can
10. use, which might affect cleaning efficacy in some cases.

8. Emergency Response Limitations: While cleaning staff may assist in minor emergencies

(e.g., cleaning up spills), they are not trained for major hazardous situations, such as biohazard

1.5 Organization and Project Plan

- ✓ Organization Plan for Cleaning deparment

1. Health and Safety Protocols:
    a. Ensure all staff are trained on OSHA and other relevant health and safety standards.
2. Regularly review and update Performance Monitoring and Quality Assurance:
    a. Conduct regular inspections and assessments of cleaning tasks
3. Communication Plan
    a. Daily Briefings: Supervisors provide daily briefings to inform cleaning staff
4. Technology and Mobile Communication Tools: reporting urgent cleaning needs or issues.
5. Evaluation and Improvement Feedback Collection: Regularly collect feedback from staff, performance, set goals,

a. This organizational plan ensures a well-structure

✓ Project Plan for cleaning deparment

1. Set Goals: Define main objectives, like raising awareness and attracting volunteers.
2. Plan and Research: Explore similar non-profit sites for ideas.
3. Gather Content: Collect RHA's mission, stories, volunteer info, and contact details.
4. Design Layout: Create a simple design focused on the RHA mission.
5. Build the Website: Develop pages, add volunteer forms, donation info, and contact options.
6. Testing: Review each feature and make sure it works well.
7. Launch: Publish the site for public use.
8. Promote: Share on social media, emails, and through RHA networks to increase reach.
9. Maintain: Regularly update stories, events, and fix any issues.

2. SOCIOECONOMIC SURVEY

2.1 Survey

To gain insights into the challenges of campus cleanliness and cleaning staff management, we conducted an online survey using Google Forms. The survey, distributed to MIT students and staff, asked about their experiences with cleaning frequency, quality, and how easily they could report issues. The feedback helped identify key areas for improvement, such as better communication, task management, and transparency. These insights were crucial in shaping the development of the MIT Cleaning Staff Management Web Application, aimed at enhancing the efficiency and effectiveness of cleaning operations across the campus.

- ✓ **Some Question & Answer of Survey**

1.How satisfied are you with the cleaning staff's performance?

Ans:-Satisfied

2.Did the cleaning staff communicate effectively during their visit?

Ans:-Yes

3.Are there areas that you believe require more attention during cleaning?

Ans:-Yes

4.Did the cleaning staff complete their tasks in a timely manner?

Ans:-Always

5. What specific improvements would you suggest for the cleaning staff?

Ans:-Improved communication

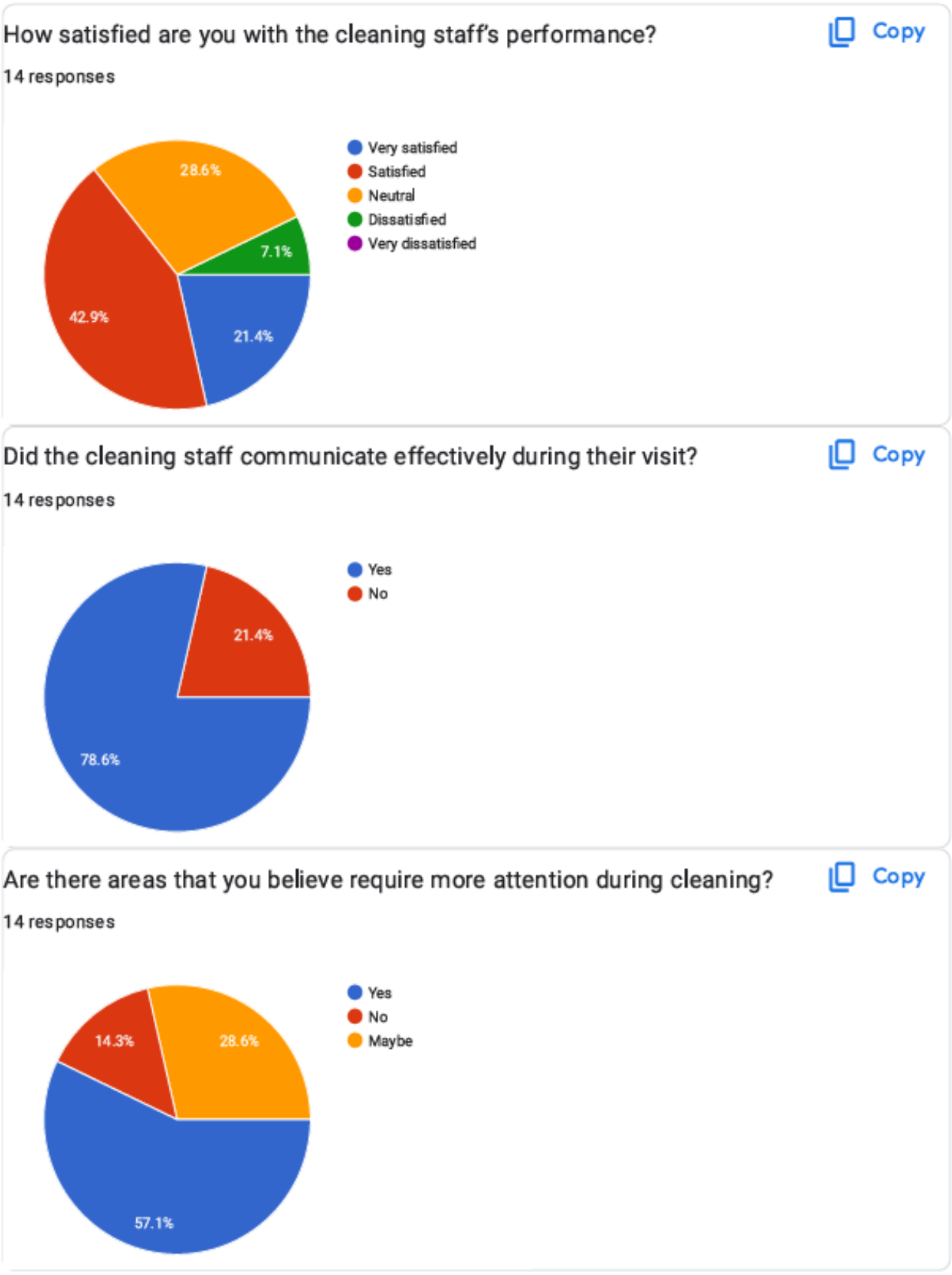
How satisfied are you with the cleaning staff's performance?
Copy
14 responses
28.6%
7.1%
42.9%
21.4%
Very satisfied
Satisfied
Neutral
Dissatisfied
Very dissatisfied
Did the cleaning staff communicate effectively during their visit?
Copy
14 responses
21.4%
78.6%
Yes
No
Are there areas that you believe require more attention during cleaning?
Copy
14 responses
14.3%
28.6%
57.1%
Yes
No
Maybe

Fig. 1.1

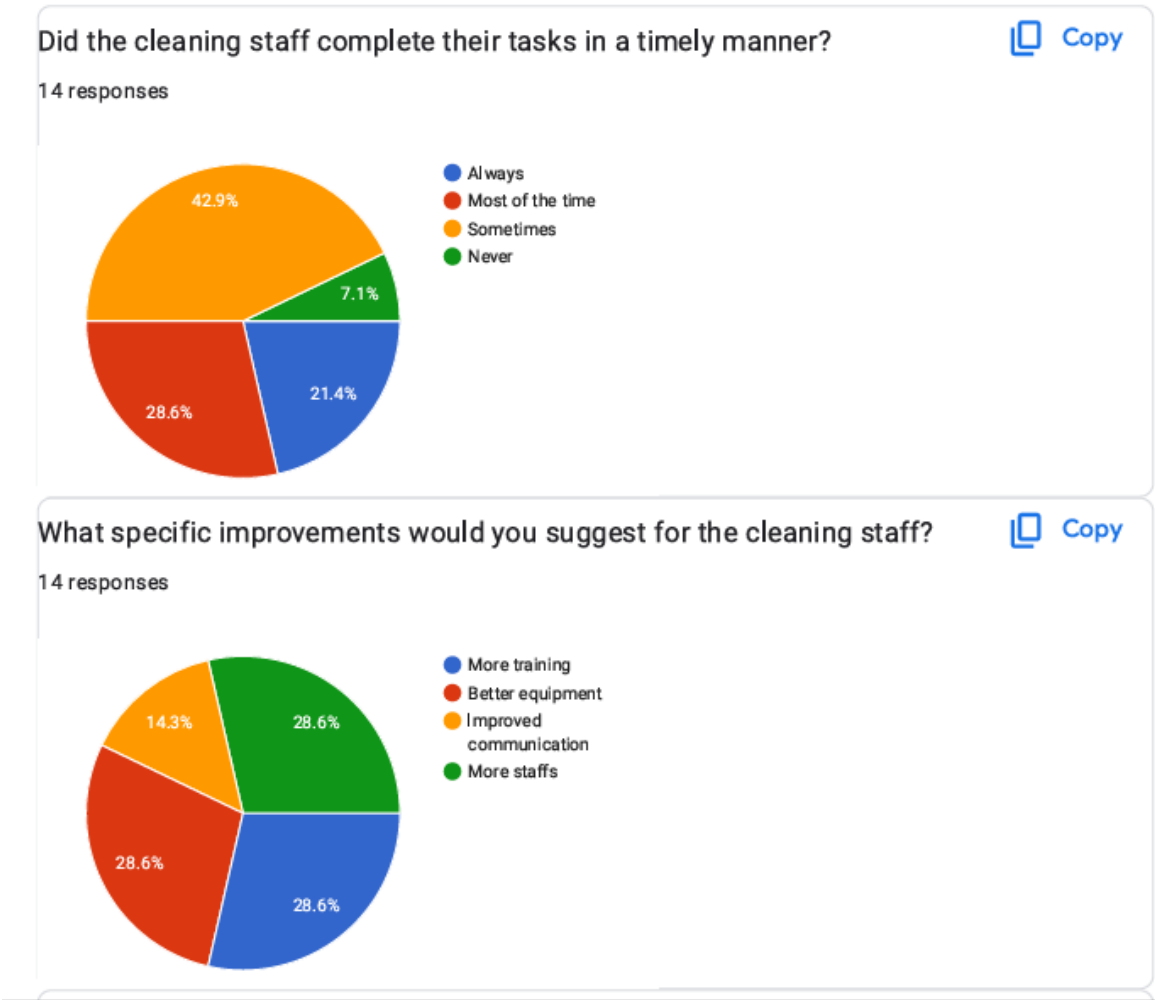
Did the cleaning staff complete their tasks in a timely manner?
Copy
14 responses
42.9%
7.1%
21.4%
28.6%
Always
Most of the time
Sometimes
Never
What specific improvements would you suggest for the cleaning staff?
Copy
14 responses
14.3%
28.6%
28.6%
28.6%
More training
Better equipment
Improved communication
More staffs

Fig. 1.2

3. IMPLEMENTATION

3.1 Proposed system

The proposed system is a web-based application designed to streamline the management of cleaning staff and improve campus cleanliness at MIT. It will allow cleaning staff to receive and update task assignments, track their schedules, and report progress in real-time. Administrators can monitor task completion, manage staff shifts, and ensure accountability through a centralized dashboard. Additionally, students will be able to provide feedback on the cleanliness of campus areas, helping to identify areas that need attention. The system aims to enhance communication, improve operational efficiency, and ensure a cleaner, well-maintained campus environment.

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3.2 Database Specification

The proposed web application is integrated with Google Sheets as its backend database to manage and store data efficiently. Cleaning staff tasks, schedules, and progress updates will be recorded and accessed in real-time through the Google Sheets interface. Administrators can easily track task completion, manage shifts, and view feedback using the Google Sheets database, ensuring seamless coordination and transparency. This simple yet powerful integration allows for easy data management while minimizing the need for complex database setups.

3.3 Website Development:

The proposed website is a single-page platform designed primarily to provide students with an interface to submit cleaning requests and tasks directly to the cleaning staff. Through a simple and user-friendly layout, students can easily report cleanliness issues, request specific cleaning services, and track the status of their requests. The site focuses on streamlining communication between students and the cleaning team, ensuring quick and efficient resolution of cleaning tasks without the need for complex navigation or multiple pages.

Screenshots :

1. Main Section :

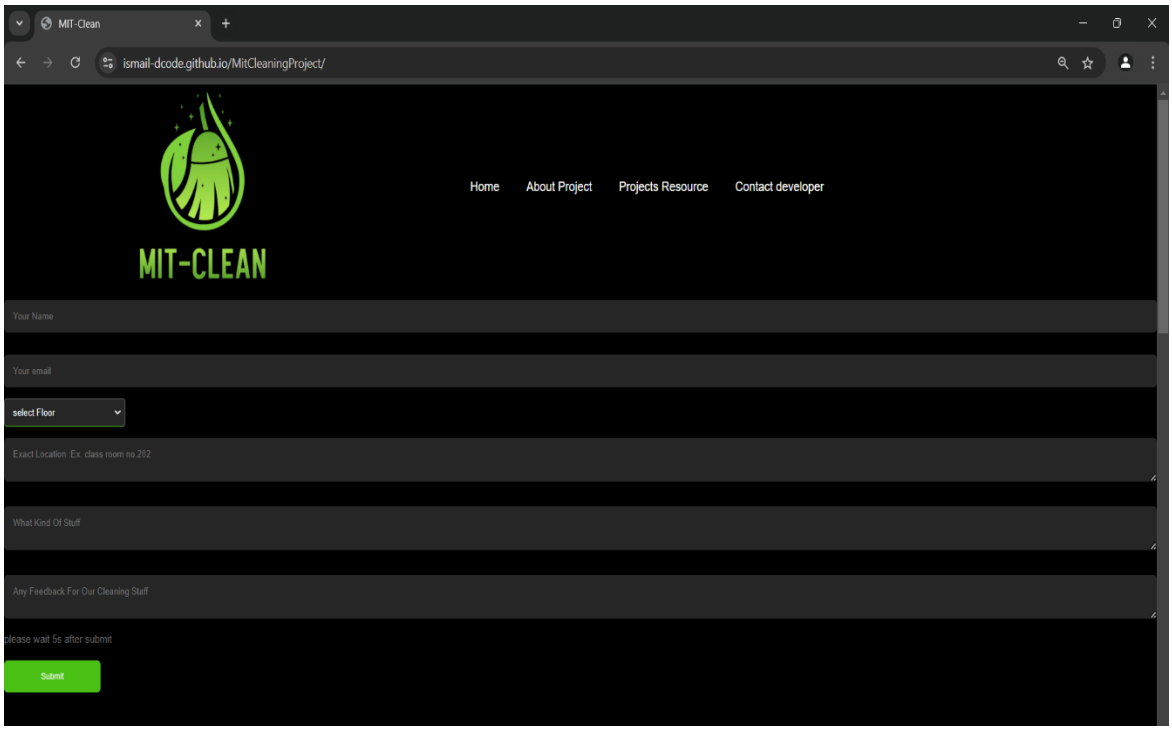

Fig .1.3

2. About Project Section :

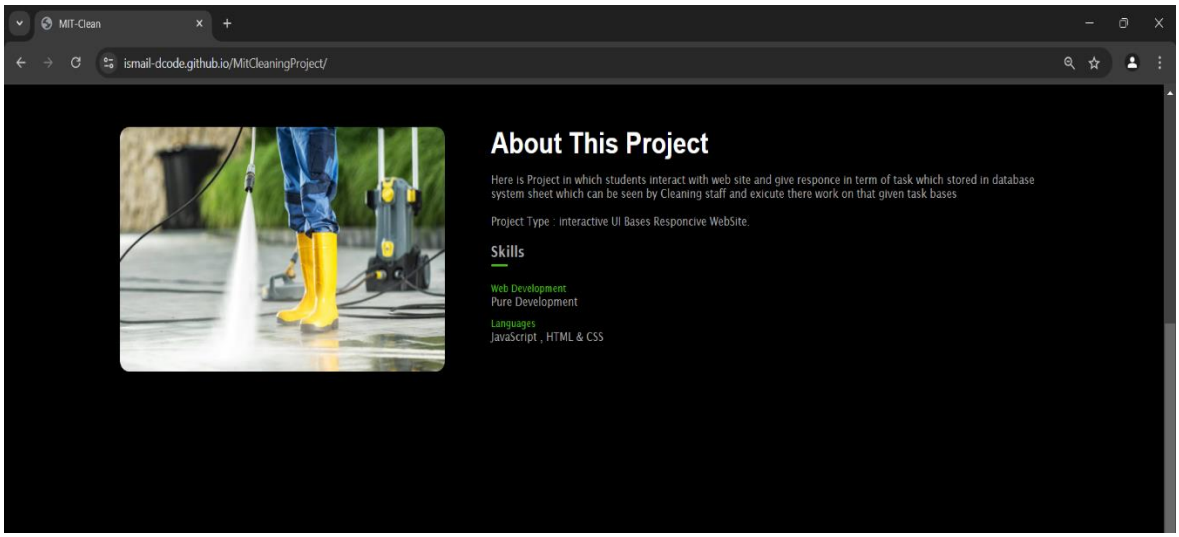

Fig. 1.4

3. Project Resource And Contact Section :

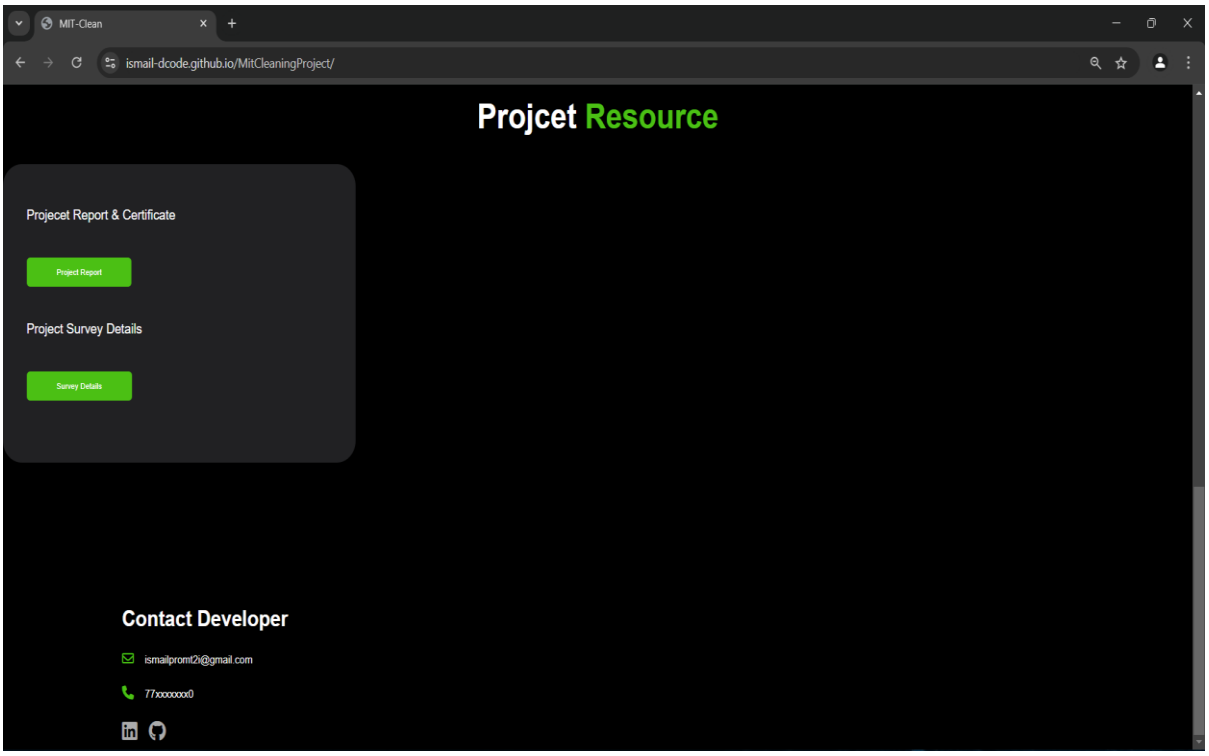

Fig. 1.5

4. CONCLUSION

4.1 CONCLUSION

The cleaning department plays a crucial role in maintaining a safe, hygienic, and welcoming environment for all staff, clients, and visitors. Through consistent efforts, attention to detail, and adherence to safety standards, the team has helped reduce health risks, enhance productivity, and improve the overall experience within our facilities

The department's commitment to quality, effective resource management, and continuous improvement has been evident. By adopting best practices, leveraging efficient cleaning methods, and implementing regular training, the team has not only maintained cleanliness but also set a high standard of excellence.

Moving forward, the cleaning department aims to build on these successes by exploring new methods, investing in eco-friendly products, and increasing efficiency through innovative tools and technologies. Together, we remain committed to upholding a clean, safe, and sustainable environment for everyone.

4.2 Future scope :

1. Adoption of Green Cleaning Practices
The department can enhance sustainability by integrating eco-friendly cleaning products and practices. This transition can reduce the environmental impact and support the organization's sustainability goals.

2. Advanced Technology and Automation
Utilizing automated cleaning equipment (such as robotic cleaners or IoT-enabled devices) can increase efficiency, reduce manual labor, and improve service quality. Implementing a cleaning management system can also streamline scheduling, track cleaning metrics, and help in resource allocation.

3. Enhanced Training Programs
Expanding training initiatives for staff on advanced cleaning methods, safety protocols, and customer service can raise overall service standards. Specialized training on handling hazardous materials or maintaining sensitive equipment could also be valuable.

4. Health and Safety Focus
With an increased focus on public health, the department could invest in infection control strategies, advanced sanitation practices, and frequent monitoring to minimize risks related to pathogens or allergens.

5. Customer-Centric Services
Implementing feedback mechanisms, such as regular surveys, can help the department understand and respond to specific needs, allowing for more tailored cleaning approaches and improved customer satisfaction.

6. Cost Optimization and Resource Efficiency
Exploring cost-effective and energy-efficient cleaning solutions can help manage the department's budget while maintaining quality standards. Regular evaluation of suppliers, equipment, and methods can ensure optimal performance at minimal costs.

7. Digital Transformation
Embracing digital solutions, such as mobile apps for reporting issues or tracking cleanliness standards, can make the department's operations more transparent and accessible to other department

REFERENCE

1. **After take help of google Sheet**

   We use Google Sheets as a reference in our web, allowing for easy data management, real-time collaboration, and seamless integration with other Google services. This enables efficient data sharing and editing across teams, helping to streamline workflows and maintain up-to-date information.

   https://docs.google.com/spreadsheets/