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Hostel Laundry Management System

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Abstract: *In many hostels, laundry work is still managed using registers or manual records, which often leads to confusion, delays, and loss of clothes. Students sometimes face problems in knowing the status of their laundry, and staff find it difficult to keep track of multiple requests. To solve these issues, a Hostel Laundry Management System is proposed.*

This system provides a simple web-based platform where students can give their laundry requests and check updates easily. At the same time, hostel staff can manage all laundry activities, such as collecting clothes, updating washing status, and handling delivery, in an organized way. The system reduces paperwork and helps avoid common mistakes.

It is developed using HTML, CSS, JavaScript, Node.js, and MySQL for smooth working and secure data storage. Overall, the system makes the laundry process easier, faster, and more reliable for both students and hostel staff.

Keywords: *Hostel Management System, Laundry Management, Web-Based Application, Automation, Student, Services, Data Management, Real-Time Tracking, Node.js, MySQL, User Interface.*

I. INTRODUCTION

In many hostels, laundry work is still handled manually using registers or notebooks. This method is not efficient and often creates problems like missing clothes, wrong entries and confusion between students and staff. As the number of students increases, it becomes harder to manage all laundry activities properly. To solve these problems, a Hostel Laundry Management System is introduced. It is a simple web-based system that helps in managing laundry work in an easier and more organized way. Students can also update the process, such as washing and delivery, without maintaining paper records. The main aim of this system is to reduce manual work and avoid common mistakes. It helps in saving time and makes the process more clear and reliable. This paper presents the design and implementation of the Hostel Laundry Management System using web technologies, to enhance efficiency, accuracy, and user satisfaction in hostel laundry services.

II. MODULE IDENTIFICATION

The Hostel Laundry Management System consists of several modules that work together to manage the laundry process in a simple and organized way. The dashboard module provides an overview of daily laundry activities, including new requests easily through the system. Once a request is submitted, the staff module reviews and accepts the request, which updates the status in the student dashboard. The tracking module shows the progress of laundry at different stages, such as accepted, in process, and completed, so students can stay informed. Instead of handling payment for each request, the system follows a monthly process. All laundry data is stored and managed in the records module, where the total number of clothes is calculated at the end of the month. Based on this, the system generates a monthly report for each student. The report module helps in creating and printing monthly summaries, making it easier for hostel management to maintain records. This approach reduces daily complexity and makes the system more practical and easy to use for both students and staff.

III. SCOPE

The Hostel Laundry Management System is designed to simplify and organize laundry activities within a hostel environment. The system mainly focuses on managing laundry requests from students, tracking the status of clothes, and maintaining proper records of all laundry activities. It allows students to submit their laundry requests online and view updates, while staff can accept requests and manage the process in an efficient way. The scope of this system includes tracking laundry from request to completion, updating status in the student dashboard, and maintaining accurate records without using manual registers. Instead of handling daily payments, the system stores all laundry details and calculates the total number of clothes at the end of the month. Based on this data, a monthly report is generated for each student, which can be used for record-keeping and billing purposes. This system is suitable for hostels, small residential campuses, and similar environments where laundry services are provided. However, it is limited to basic laundry operations and does not include advanced features like online payment integration or external service management. Overall, the system aims to reduce manual work, improve accuracy, and make laundry management more convenient and reliable.

IV. EXISTING SYSTEM

TABLE I EXISTING SYSTEM

Sr. No.	Title of Paper	Year	Author	Gap Identified	Key Points
1	Laundry Management System	2019	R. Sharma	Limited automation	Focused mainly on record keeping but lacked proper tracking system
2	Smart Hostel Laundry System	2020	A. Kumar	No real-time updates	Allowed request entry but did not provide live status tracking
3	Web-Based Laundry Service Application	2021	L. Anderson	Lack of reporting	Basic features available but no monthly report generation
4	Laundry Tracking System	2022	P.Singh	Poor scalability	Worked for small setups but not suitable for large hostel environments

V. ARCHITECTURE DIAGRAM



Fig.1.ArchitectureDiagram

VI. PROPOSED SYSTEM

The Hostel Laundry Management System provides a simple and effective solution for managing hostel laundry services digitally:

- Central dashboard to monitor all laundry requests and activities
- Student module to send laundry requests easily
- Staff module to accept and manage laundry tasks
- Laundry tracking system to update status (accepted, washing, completed)
- Real-time updates shown in student dashboard
- Centralized data storage for all laundry records
- Monthly calculation of total clothes instead of per request billing
- Automatic report generation for each student at the end of the month
- Web-based application built using HTML, CSS, JavaScript, Node.js, and MySQL

This system helps reduce manual work, avoids errors, and improves overall efficiency of hostel laundry management.

VII. RESULT

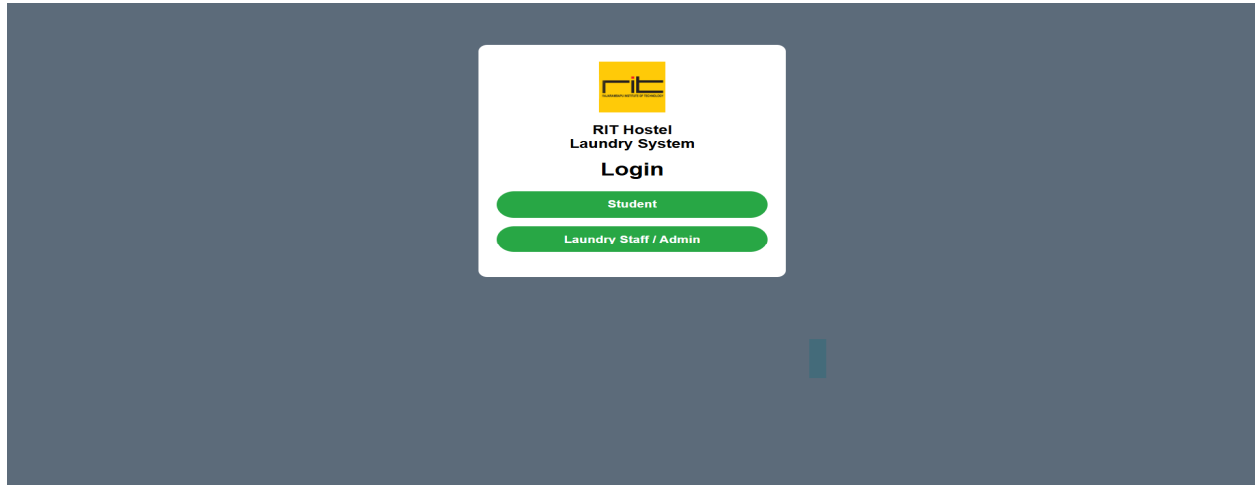


fig1.Student and Laundry staff first page

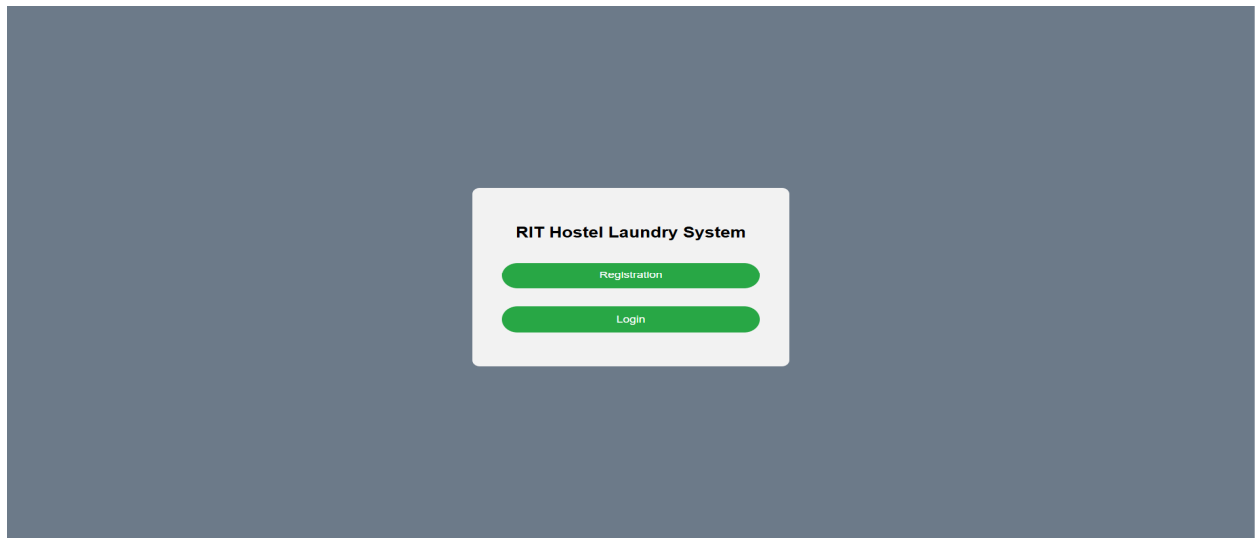


fig2.Student registration and login page

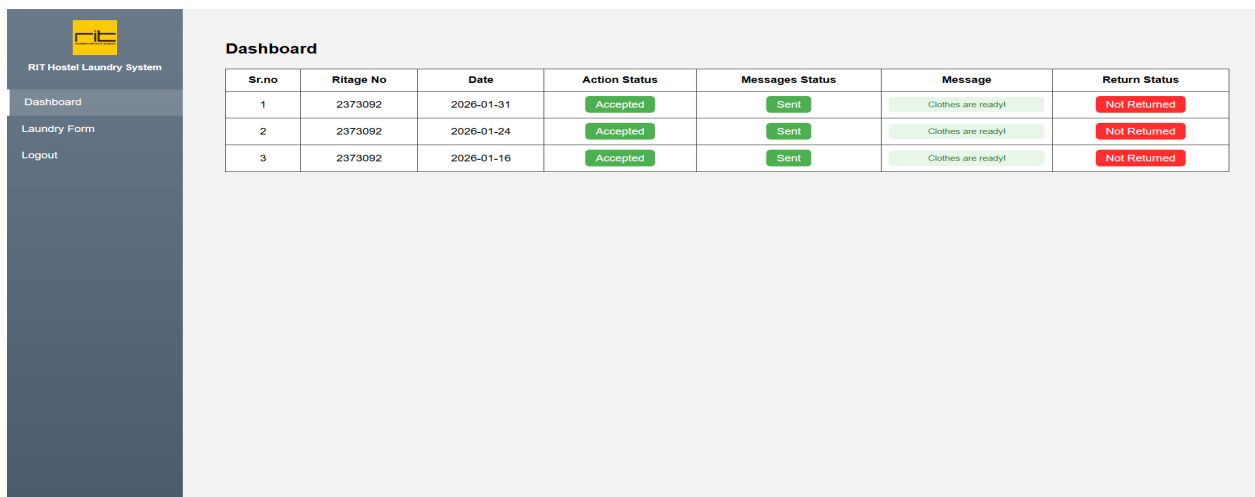


fig3.Student Dashboard

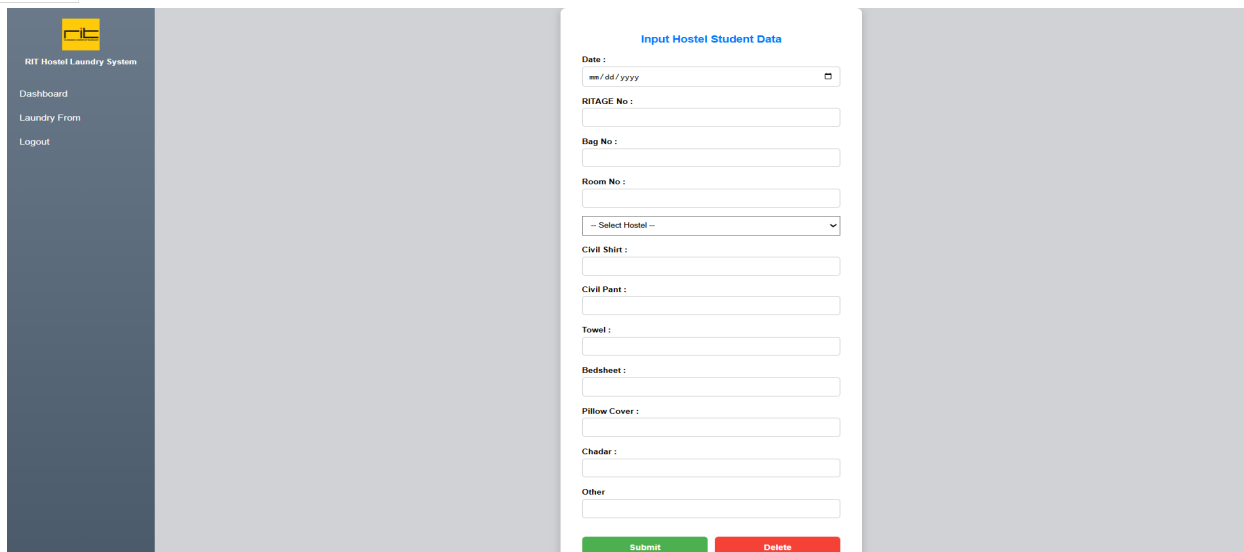


fig4.Student Laundry form

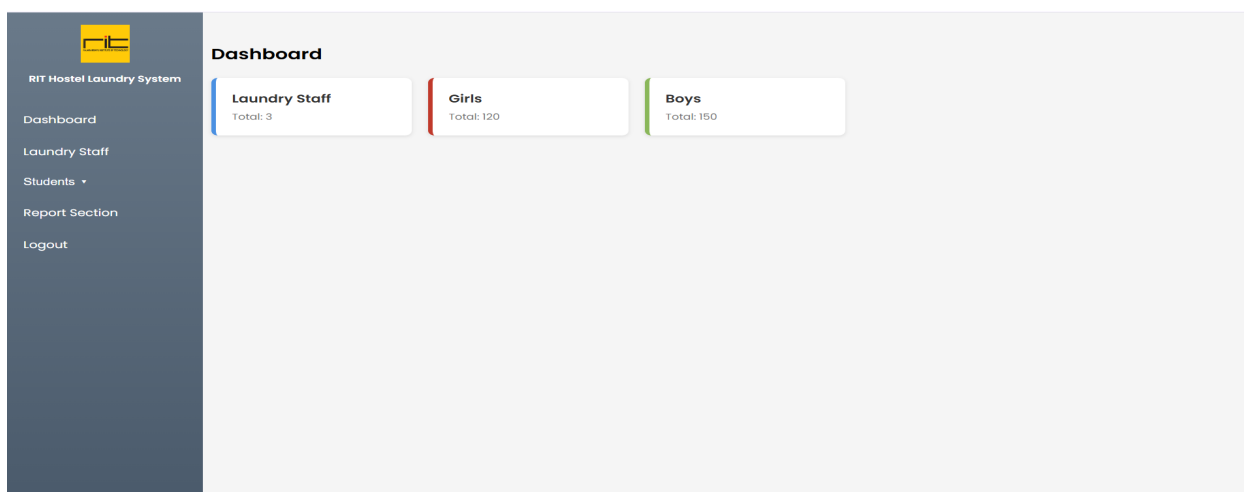
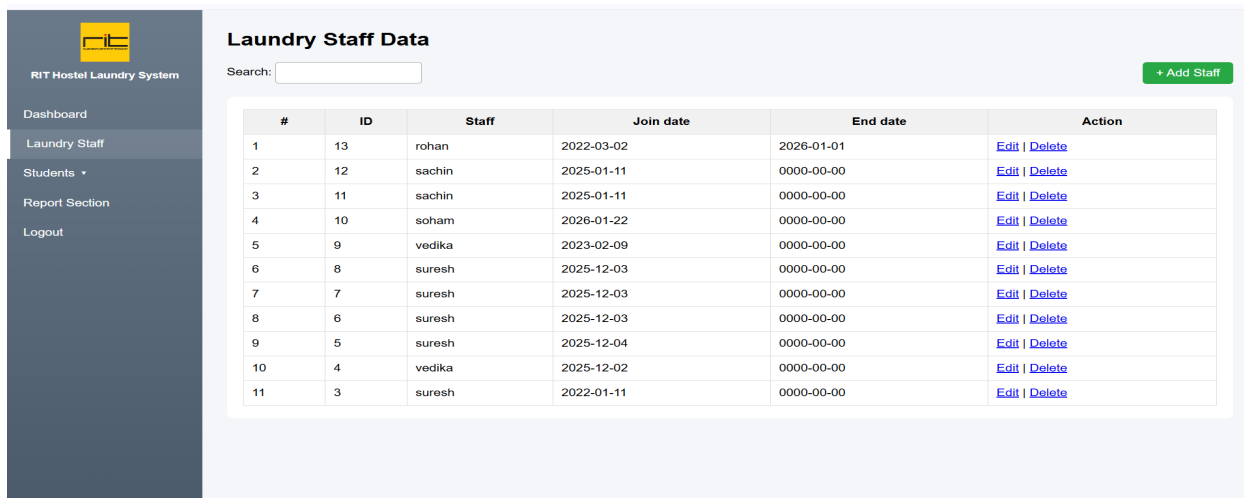
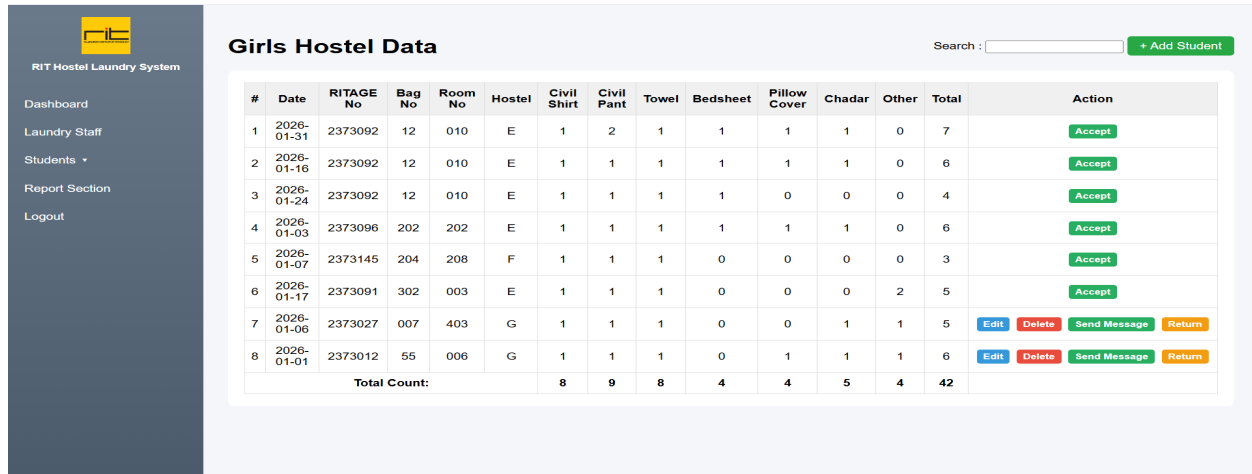


fig5.Admin Dashboard



#	ID	Staff	Join date	End date	Action
1	13	rohan	2022-03-02	2026-01-01	Edit Delete
2	12	sachin	2025-01-11	0000-00-00	Edit Delete
3	11	sachin	2025-01-11	0000-00-00	Edit Delete
4	10	soham	2026-01-22	0000-00-00	Edit Delete
5	9	vedika	2023-02-09	0000-00-00	Edit Delete
6	8	suresh	2025-12-03	0000-00-00	Edit Delete
7	7	suresh	2025-12-03	0000-00-00	Edit Delete
8	6	suresh	2025-12-03	0000-00-00	Edit Delete
9	5	suresh	2025-12-04	0000-00-00	Edit Delete
10	4	vedika	2025-12-02	0000-00-00	Edit Delete
11	3	suresh	2022-01-11	0000-00-00	Edit Delete

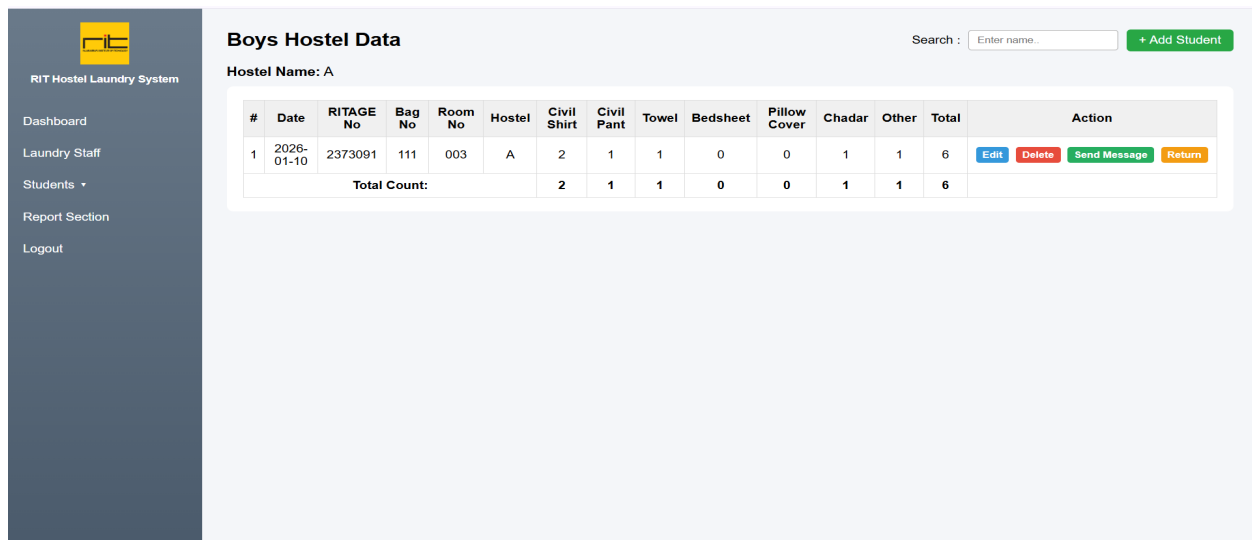
fig6.Laundry Staff data



Girls Hostel Data Search: + Add Student

#	Date	RITAGE No	Bag No	Room No	Hostel	Civil Shirt	Civil Pant	Towel	Bedsheet	Pillow Cover	Chadar	Other	Total	Action
1	2026-01-31	2373092	12	010	E	1	2	1	1	1	1	0	7	Accept
2	2026-01-16	2373092	12	010	E	1	1	1	1	1	1	0	6	Accept
3	2026-01-24	2373092	12	010	E	1	1	1	1	0	0	0	4	Accept
4	2026-01-03	2373096	202	202	E	1	1	1	1	1	1	0	6	Accept
5	2026-01-07	2373145	204	208	F	1	1	1	0	0	0	0	3	Accept
6	2026-01-17	2373091	302	003	E	1	1	1	0	0	0	2	5	Accept
7	2026-01-06	2373027	007	403	G	1	1	1	0	0	1	1	5	Edit Delete Send Message Return
8	2026-01-01	2373012	55	006	G	1	1	1	0	1	1	1	6	Edit Delete Send Message Return
Total Count:						8	9	8	4	4	5	4	42	

fig7.Admin side Girls Hostel data for all hostel

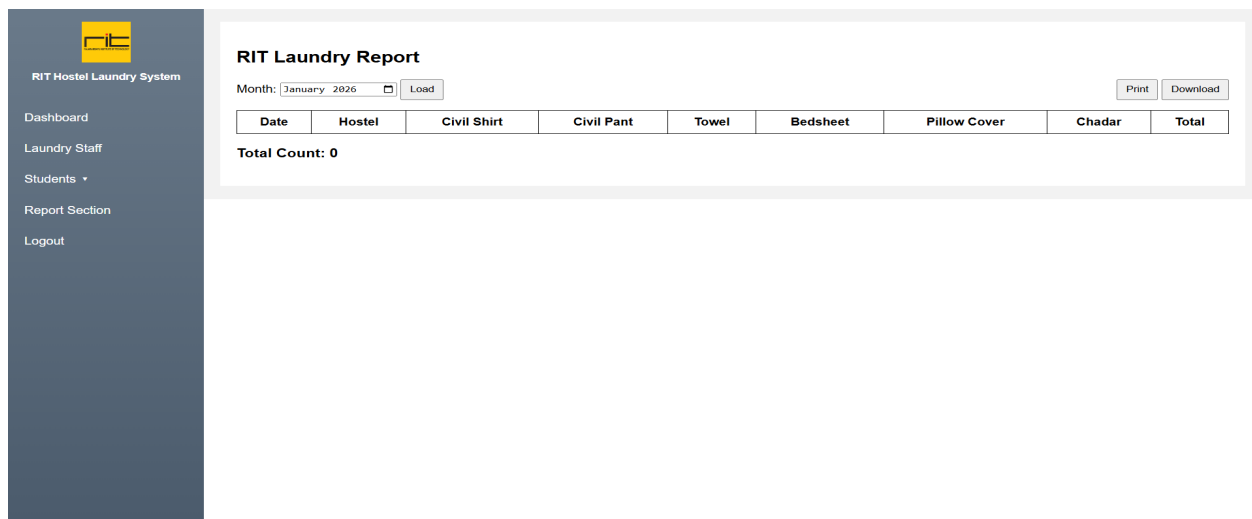


Boys Hostel Data Search: + Add Student

Hostel Name: A

#	Date	RITAGE No	Bag No	Room No	Hostel	Civil Shirt	Civil Pant	Towel	Bedsheet	Pillow Cover	Chadar	Other	Total	Action
1	2026-01-10	2373091	111	003	A	2	1	1	0	0	1	1	6	Edit Delete Send Message Return
Total Count:						2	1	1	0	0	1	1	6	

fig8.Admin side Boys Hostel data for all hostel



RIT Laundry Report

Month: Load

Date	Hostel	Civil Shirt	Civil Pant	Towel	Bedsheet	Pillow Cover	Chadar	Total
Total Count: 0								

fig9.Laundry Report

VIII. CONCLUSION

The Hostel Laundry Management System helps in reducing the problems faced in manual laundry record handling in hostels. It makes the whole process easier by keeping proper records of laundry items, dates, and hostel-wise details in a systematic way. With the help of a database-based web application, data can be stored and accessed quickly without confusion or errors. This improves accuracy in billing and makes the management process more transparent for both students and staff. In short, the system saves time, reduces manual work, and improves overall efficiency of laundry management in hostels. In future, it can be improved further by adding mobile support, notifications, and better reporting features.

REFERENCES

- [1] S. V. Golande, P. A. Jadhav, and A. U. Shetty, "Hostel Management System," *International Journal of Advanced Research in Science, Communication and Technology*, vol. 5, no. 11, 2025.
- [2] I. Eweoya, A. Awoniyi, and O. Adeniyi, "Development of Web-Based Hostel Management System," *British Journal of Computer, Networking and Information Technology*, vol. 8, no. 1, pp. 30–41, 2025.
- [3] J. K. A. Reddy, B. Naveen, H. Babu, and A. S. Manohar, "Hostel Management System using MERN Stack," *International Research Journal of Modernization in Engineering Technology and Science*, vol. 7, no. 3, 2025.
- [4] O. D. Adekola, S. O. Maitanmi, O. Akande, and I. T. Adeoye, "Online Laundry Management System," *International Journal of Computer*, vol. 41, no. 1, 2021.
- [5] O. O. Shoewu, N. T. Makanjuola, and D. A. Phillips, "Design and Implementation of a Laundry Management System," 2016.
- [6] R. Rastogi, M. Tyagi, P. Pranav, and P. Vaidywan, "A Smart Laundry Management System for Modern Society," *Acta Scientific Computer Sciences*, 2023.



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