

SDM COLLEGE OF ENGINEERING AND TECHNOLOGY, Dharwad-580002

(An autonomous institution affiliated to Visvesvaraya Technological University,
Belgaum-590018)



Department of Information Science and Engineering

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“Hostel Management and Food Surplus Distribution Platform”

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CERTIFICATE

This is to certify that the Minor Project Phase I entitled “Hostel Management and Food Surplus Distribution Platform” is a bona fide work carried out by Mr. Aditya S Honnakasturi, Mr. Pratham Manjunath Hegde, Mr. Kiran Jantgal, and Mr. Pradyumna Naik bearing USN 2SD23IS006, 2SD23IS034, 2SD24IS402, and 2SD23IS032 respectively, in partial fulfillment of the requirements for the V Semester B.E. Degree in Information Science and Engineering at S. D. M. College of Engineering, Autonomous Institution under Visvesvaraya Technological University, Belagavi, during the academic year 2025–2026.

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PREFACE

In educational institutions, effective hostel management is essential to ensure student comfort, safety, and operational efficiency. However, traditional hostel systems often face challenges such as manual record keeping, delayed complaint resolution, lack of transparency, and inefficient communication among stakeholders. In addition, surplus food generated in hostel messes is frequently wasted due to the absence of structured redistribution mechanisms.

The *Hostel Management and Food Surplus Distribution Platform* was developed to address these challenges by providing a centralized, role-based digital solution. The platform streamlines hostel operations including room allocation, complaint handling, staff coordination, and parent monitoring, while also promoting sustainability through an integrated food surplus distribution module. Designed with usability and transparency in mind, the system enables efficient interaction between hostel authorities, students, staff, parents, mess managers, and NGOs.

By leveraging modern web technologies and a clean, intuitive interface, the platform aims to improve administrative efficiency, reduce food wastage, and foster social responsibility. This project reflects the growing need for smart, technology-driven solutions in institutional management and contributes toward building more organized, transparent, and sustainable hostel environments.

ABSTRACT

The *Hostel Management and Food Surplus Distribution Platform* is a web-based, role-driven application designed to streamline hostel administration and promote sustainable food management within educational institutions. The system digitizes core hostel operations such as room allocation, complaint handling, staff coordination, and parent monitoring through a centralized platform.

Developed using modern frontend technologies including React and Tailwind CSS, the platform provides a responsive and user-friendly interface with strict role-based access control. An integrated food surplus distribution module enables mess managers to record surplus food availability and allows registered NGOs to request and collect food, thereby reducing food wastage and supporting social responsibility.

The platform enhances transparency, operational efficiency, and accountability by providing real-time updates on room occupancy, complaint status, and surplus food distribution. With its scalable architecture and clean design, the system is suitable for institutional deployment and future backend integration. Overall, the project demonstrates an effective use of technology to improve hostel management while contributing to sustainability and community welfare.

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