Mess Management System

Feature-wise Webpage Description

Department: DBMS

Submitted By:

Jatin Goyal (CS23B2045) Sumit Kumar (CS23B2008) Vansh Singh (CS23I1028) Vasim Khan (CS23B2047)

Date: April 16, 2025

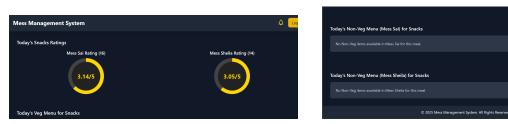
Contents

1	Home Page	2
2	Login and Authentication	3
3	Admin Dashboard	4
4	Mess-Specific Dashboard (Sai/Sheila)	5
5	Student Dashboard	6
6	Advanced Functionalities	7
7	Technologies Used	8
8	Database Schema	9
9	Conclusion	10

1. Home Page

The Home Page is the primary point of interaction for students. It offers real-time and dynamic information based on the current meal and mess schedule.

- Live Food Ratings: Displays current ratings for Breakfast, Lunch, Snacks, and Dinner, refreshed according to the time of day. Ratings are shown separately for both Sai and Sheila messes.
- Today's Menu Display: Displays only the meals relevant to the current time.
- Special Meals (Veg/Non-Veg): Highlights today's special food items, separated by veg and non-veg options.
- Dynamic Non-Veg Menu: Non-veg items are displayed by floor and vary by meal and mess.
- Notifications Panel: Shows the latest announcements from the mess admin (e.g., schedule changes).
- Login Button: Provides login access for students, mess officials, and admins.



(a) Live Ratings Overview

(b) Today's Special Meals

Figure 1: Home Page Screens

2. Login and Authentication

- Session-Based Login: Utilizes Flask sessions to manage user authentication.
- Role-Based Access: Redirects users based on their role—Student, Mess Official, or Admin.
- Secure Routing: Ensures only authorized users can access protected routes.

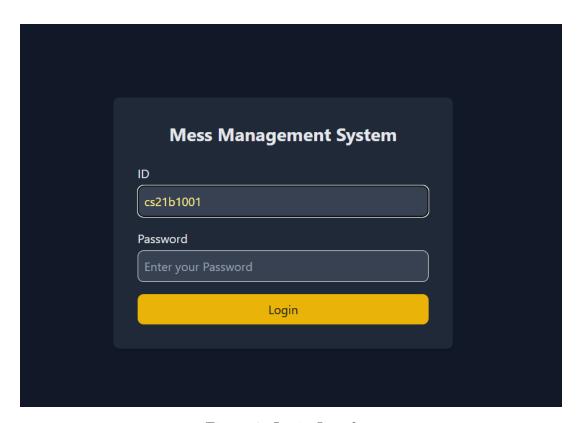


Figure 2: Login Interface

3. Admin Dashboard

The Admin Dashboard offers comprehensive control and analytics for mess operations.

- **Update Menu:** Modify the base veg menu for future days. Changes reflect globally unless overridden by mess officials.
- **Send Notifications:** Broadcast alerts such as meal timing updates, special events, or announcements.
- View Feedback: Display student feedback categorized by week, day, meal, and food item.
- View Waste Data: Access aggregated data from mess officials to analyze food wastage.
- Review Payment Details: View payment records, both online and manually entered.
- **Select Mess Dropdown:** Toggle between messes to view or manage individual operations.
- Mess Switching Control: Enable or disable student mess switching (typically at the start of the month).
- Profile Button: Access admin credentials and change password options.

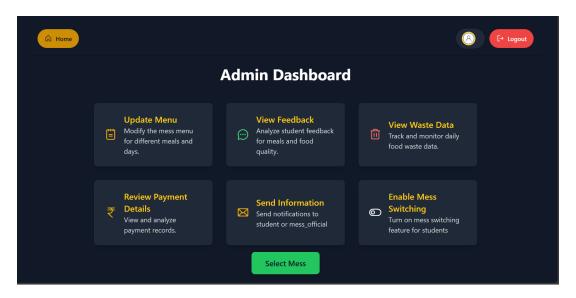
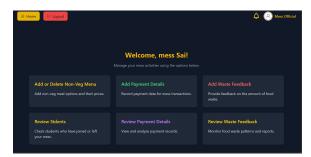


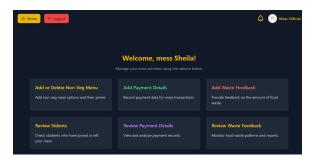
Figure 3: Admin Dashboard Interface

4. Mess-Specific Dashboard (Sai/Sheila)

Accessible to mess officials of Sai or Sheila mess for localized operations.

- Manage Non-Veg Menu: Update non-veg options based on floor and meal.
- Add Payment Details: Manually log student payments made via cash/UPI.
- Submit Waste Feedback: Enter data for food prepared, consumed, and wasted.
- Review Students: View enrolled students and their mess-switching status.
- Analyze Payments: Track non-veg purchases by meal and day.
- Analyze Waste Data: Visualize waste trends; future improvements may include AI-based recommendations.





(a) Manage Non-Veg Menu

(b) Feedback Overview

Figure 4: Mess Dashboard Screens

5. Student Dashboard

Enables students to actively interact with the mess system and manage their own data.

- Payment History: Displays non-veg food purchases and corresponding amounts.
- Submit Feedback: Allows students to rate food and submit comments per meal (scale of 1–5).
- Previous Month's Ratings: View past ratings to help decide mess choice for the upcoming month.
- Top Food Ratings Today: Lists today's top-rated dishes across both messes.





(a) Feedback Submission

(b) Top Rated Items

Figure 5: Student Dashboard Screens

6. Advanced Functionalities

- Mess Switching: Students can switch messes based on capacity and availability (first-come, first-serve).
- Alternate Week Logic: Alternates between Odd and Even weeks for feedback and planning.
- Temporary Veg Menu Override: Admins can override the default veg menu for one day only—it resets the next day.

7. Technologies Used

• Frontend: HTML5, CSS, TailwindCSS, JavaScript

• Backend: Flask

• Database: MySQL

• Authentication: Session-based

• Hosting: Render (Frontend + Backend), freesqldatabase (Database)

• Version Control: Git, GitHub

8. Database Schema

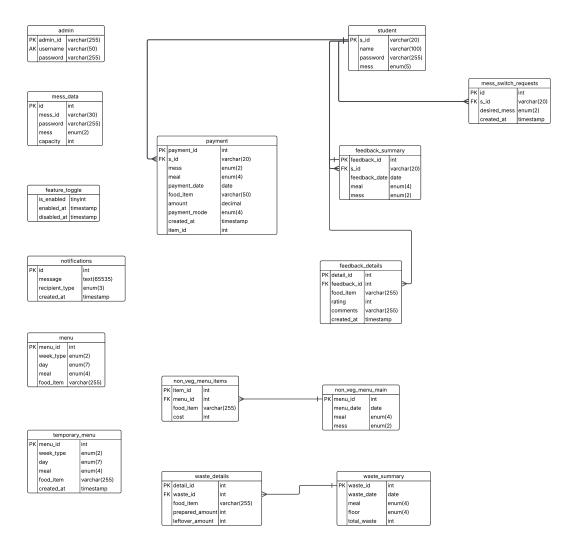


Figure 6: Database Schema Design

9. Conclusion

The Mess Management System delivers a streamlined, transparent, and modern solution for handling student mess operations. It fosters efficient communication, reduces food waste, and enhances decision-making with real-time data. With features like role-based access, feedback analytics, and smart mess switching, the system establishes a complete digital ecosystem for mess administration.

For a live demo and more information, visit: https://manageit-mxt6.onrender.com In case it don't work visit: https://manageit-ca07.onrender.com

• Admin Login Credentials:

ID: user@123

Password: dontseeit

• Mess Sai Login Credentials:

ID: hello

Password: hi@123

• Mess Sheila Login Credentials:

ID: check@123

Password: see@12345

• Student Login Credentials:

ID: cs21b1001

Password: cs21b1001