National University of Sciences and Technology (NUST)
School of Electrical Engineering and Computer Science

Faculty of Computing

CS220: Database Systems

Class: BSDS-02

Assignment 1

NUST - Mess Facilities Management System (MFMS)

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(table below is interactive)

Appendix with interview transcripts also attached after references.

WORK DISTRIBUTION

Name	Contributions	Corresponding part of the deliverable
Munha	Transcribed interviews, summarized interviews, identified key points from summaries	3. Interview Transcripts
Gulwarina	Identified transactional management issues, identified data inconsistencies, identified functional requirements, analyzed survey and interview data, conducted interviews	1. Introduction 2. Summarize requirement gathering process 4. Functional Requirements 6. Analysis of Transaction Management Issues
Ayesha	Identified attributes, entities, and relationships from interviews, conducted interviews, created surveys, wrote the report conclusion	5. Identification of Entities, Attributes, and Relationships 9. Conclusion 11. Made surveys (part of pre-defined key tasks)
Farjad	Created ERD, made abstract data model, conducted interviews	7. Entity-Relationship Diagram (ERD) 8. Relational Data Model

Introduction

a. Overview of the Mess Facilities Management System

The Mess Facilities Management System is designed to improve the efficiency of mess operations across all NUST facilities. This will bring together different aspects of mess management, such as meal preferences, billing, inventory tracking, and complaint resolution. This system will help different stakeholders—including students, faculty, mess staff, and administrators—access and manage relevant information based on their specific roles.

b.Purpose and Significance of the system

- **Saves Time and Reduces Errors:** Automating routine tasks cuts down on paperwork, minimizes mistakes, and speeds up processes like billing or inventory updates.
- **Reliable Data for Decisions:** Accurate records of data such as transactions, inventory, and feedback ensure administrators can make the correct choices about menus and budgets etc.
- **Flexible for different Stakeholders:** Meets the needs of different users by providing relevant features for each user.
- **Supports Strategic Planning:** Helps in budgeting, scheduling, and long-term improvements by strategic improvements utilizing the collected data

C. Brief of Methodology

The project will follow these steps:

1. **Understanding Needs:** We'll start by interviewing and surveying students, faculty, and mess workers to pinpoint their challenges and expectations.
2. **Data Analysis:** The collected information will be studied to identify key components and relationships to shape the system's design.
3. **Reviewing Current Processes:** We'll analyze the existing payment and feedback methods to spot inefficiencies, like delays in billing, and brainstorm solutions.
4. **Designing the System:** We'll map out the system's structure with diagrams (ERD) and convert it into a functional database model.
5. **Testing and Refining:** Before launch, the design will be evaluated against stakeholder needs to ensure it achieves its purpose.

2. Summary of requirement gathering process

Source	Stakeholder / Details	Key Insights	Impact on System Design
Interview 1 (Audio 11, Student 1)	Student 1	• Registration is done online or physically. • Mess-off procedure is annoying(manager's office visit, limited to 12 days). • Billing errors (e.g., double payment) create frustration. • Complaints are ignored unless raised collectively • Demand for a digital feedback system with meal ratings/reviews.	• User Registration & Profile Management (supporting both online and offline registration). • Digital Mess-Off Management module to • Billint System with proper tracking • Integrated Complaint & Feedback and Meal Rating System.
Interview 2 (Audio 12, Student 2)	Student 2	• Payments via "qalam" online; feedback forms are largely unaddressed • Students are charged even for meals skipped. • Request for daily menu customization and a meal rating option.	• Meal Registration & Customization that allows daily menu adjustments. • Billing system that charges only for consumed meals. • Token-Based Meal Registration & Attendance • Meal Rating System for quality feedback.
Interview 3 (Audio 7, Mess Cook)	Mess Cook	• Cooks prepare food and then borrow extra if needed. • Make sure to never bring expired food. •Belief that an online system would improve operations.	• Inventory Management System for real-time tracking. • Centralized Scheduling to adjust quantities
Interview 4 (Audio 4,5,6, Ayesha Hostel Manager)	Faculty/Hostel Manager	• Faculty are satisfied with food quality and variety. • Faculty are exempt from billing issues. • Regular mess usage without payment complications.	• User Registration & Profile Management to differentiate between paying students and non-paying faculty. • Separate billing schemes for both.

Interview 5 (Audio 9, Rumi Hostel Mess Supervisor)	Mess Supervisor	• Oversees food rationing • Uses a manual register; • Efficient complaint resolution and an available mess-off option.	• Digital Mess-Off Management module • Digital Record-Keeping and complaint resolution. • Performance Monitoring tools.
Interview 6 (Audio 2, Mess Supervisor)	Mess Supervisor	• Daily meal preparation is adjusted based on student attendance. • Paper-based reporting for operational issues. • Uses manual notifications for issues like gas shortages.	• Integrated Notification & Real-Time Updates for operational alerts. • Digitized Record-Keeping • Meal Preparation functionalities.
Interview 7 (Audio 10, Zainab Hostel Manager)	Hostel Manager	• Faculty rely on mess despite food quality not matching home-cooked meals. • Current meal plan is non-user-friendly (issues with menu sequencing, e.g., biryani vs. pulao). • Suggestion for a token system and biometric attendance • staff shortages.	• Token-Based Meal Registration • Staff Scheduling • Biometric Attendance Management.
Interview 8 (Audio 1, Chef Arshad Mehmood)	Chef at SEECS Mazdoor Cafe	• Operates on a pre-planned daily menu. • Just-in-time procurement minimizes waste. • Maintains daily reports and effectively manages gas supply issues.	• Inventory & Ingredient Management System for just-in-time ordering .• Real-Time Gas Supply Monitoring. • Digital Record-Keeping
Interview 9 (DD Female Hostel)	Hostel Management	• Manual pre-paid billing with strict mess-off limits (max 12 days off). • Decentralized menu planning with student input. • Manual supply chain	• Digitized Billing with flexible mess-off management. • Centralized Scheduling with integrated student feedback. • Automated Inventory Management. • Budgeting Dashboard

Interview 10 of Mess Supervisor Female Hostels	Mess Faculty	• Meal attendance inaccuracy, billing errors. • Food wastage due to poor demand tracking. • Complaints about meal quality, billing, hygiene. • Students want meal customization. • Faculty need billing/menu updates. • Ingredient shortages impact meal quality. • Management lacks meal quality oversight.	• Biometric Meal Verification to revolve attendance issue • Token-Based Meal Registration for unfair billing • Complaint System to tackle issue of complaints • Meal Registration & Customization to make food more diverse • Real-Time Notifications • Inventory Management System for ingredient shortage warnings etc
Student Surveys	Students (78 responses; data from various questions)	• **Meal Rating System:** 92.3% are interested in a system to improve food quality. • **Billing Issues:** 55.8% reported they have not been wrongly charged (implying a notable portion have experienced billing errors). • **Complaint Process:** Ease of conveying complaints rated very low (33 responses gave 1 star, 29 gave 2 stars, 14 gave 3 stars), indicating dissatisfaction. • **Online Payment:** 47 responses indicate usage of online methods to pay mess bills. • **Menu Preference:** Only 1 out of 78 favors a fixed meal plan, suggesting a strong preference for a changing menu. • **Biggest Issues (60 responses):** Common complaints include poor taste, repetitive/fixed menus, being charged for uneaten meals, hygiene and cleanliness issues, and inflexible meal-off policies.	• Strong support for a Meal Rating System to collect continuous feedback (92.3% yes) .• Better Billing to eliminate extra charges and support meal-wise billing. • Better Complaint & Feedback module to be more accessible and responsive (given the low ease ratings). • Implement a flexible Mess Menu Registration & Customization module that supports a changing menu and token-based meal opt-in, addressing the common issues raised by students (taste, variety, hygiene, and flexible mess-off options).

3. Interview Transcripts

3.1 Summary of Interviews

Following are the summarized versions of the stakeholders' interviews:

Interview 1 (student 1, audio 11)

Summary:
The interview highlights a number of problems in the existing mess system and then how they can be resolved. Students register for meals through an online banking application or they physically go to banks. Students are not happy with the mess-off procedure, which involves them going to the manager's office every time. Mess-off is restricted to only 12 days.

There were also billing complaints, such as a student who accidentally paid the last month's bill and was asked to pay twice the following month with no refund. Filing complaints is also a hassle as they are generally not considered unless a group of students raise the issue collectively. Students suggest a digital feedback system to facilitate coordination, and meal ratings and reviews for improved food quality.

Interview 2 (student 2, audio 12)

Summary:
This interview talks about how students pay the mess bills online on Qalam. For complaints they receive a feedback form which isn't addressed most of the time. Mess conducts a meeting where they decide about prevalent concerns. This Student doesn't eat all 3 meals of the day at the mess but is charged for all 3 meals nonetheless. The student thinks a digital system would benefit the mess system to a great extent and would like to have a meal rating and reviewing option on it. The student thinks that the quality of the mess is considerably better than other hotels but the mess is overpriced. Finally the student says that if a digital system is implemented, the option to view and change the daily meal menu should be given.

Interview 3 (head chef female hostel, audio 7)

Summary:
During this interview the chef says that the mess never faces an excess of food as the cooks prepare meals for 50 students less than the total student strength, if the food is less they borrow it from the neighbouring hostels. The mess has never faced an issue of expired food as they never bring in food that is expired ever. The chef says that the online system would be better but he says that the mess system is already computerized.

Interview 4 (Ayesha hostel manager, audio 4,5,6)

Summary:
In this interview the manager says that she eats at the mess 3 times a day and the faculty doesn't have a separate meal plan. The meal plan is the same for the students and the faculty. She says that she is satisfied with the food variety and quality provided at the mess. Finally she says that she has never faced any incorrect payment and billing issues because she doesnt pay for the mess as none of the faculty has to pay.

Interview 5 (Rumi hostel mess supervisor, audio 9)

Summary:
In this interview the supervisor says his job is to control the rationing of the food.The biggest issue he faces while running the mess is food differences. Currently the mess has a register system and that is what they prefer because it's easy to manage in their opinion. All the food is properly analysed before buying. All the complaints are properly addressed and the hygiene is not compromised upon.The students with medical issues are given a simple soft diet. The menu of the mess is changed after every annual mess meeting. Professionally, the supervisor has no complaints against the mess system. Every hostel gets their own part in the total food ration according to its strength. The faculty doesn't have to pay any mess bill. The students also have a mess off option on days where they are not in the hostel.

Interview 6 (Mess supervisor male hostel, audio 2)

Summary:
The interview highlights key aspects of the mess operations, including food procurement, storage, meal preparation, and problem resolution. Ingredients are sourced twice every 15 days, with meat being brought in fresh daily. Meal quantities are determined everyday based on the number of students who will be availing the mess that day, ensuring that food is neither wasted nor insufficient.

If food runs short, additional servings are prepared based on student demand. Meal preparation takes 2 to 3 hours, depending on the menu. While gas shortages are managed with prior load-shedding notifications and backup cylinders, complaints regarding other issues are documented on paper. The mess has a staff of 18, including 9 cooks and 9 waiters.

If a staff member is absent, they are given a holiday. Any operational problems are reported to senior management, who send them to higher authorities. The manager provides daily updates to the mess management on student attendance to help them plan meals accordingly.

Interview 7 (Zainab Hostel Manager, audio 10)

Summary:
The interview provides insights into the expectations and challenges faced by faculty and hostel management regarding the mess system. While faculty
acknowledge that mess food cannot be the same as a home-cooked meal, they rely on it daily due to restrictions on cooking and the high cost of ordering outside.

The current meal plan is not user-friendly, though recent efforts have been made to involve students in menu changes. Issues with menu sequencing persist. The manager prefers to replace certain dishes like biryani with pulao. Billing inaccuracies are not a common complaint, but the lack of a proper payment system is noted. Feedback and complaints are typically shared directly with the supervisor or recorded in a complaint register.

A major suggestion for improvement is the introduction of a token system. This would help reduce food wastage and resolve billing concerns, as students currently pay even when they do not eat. For this manager, the biggest challenge is staff shortages, affecting both mess operations and hostel cleanliness. There are not enough sanitary workers and caretakers. To ease management, biometric attendance for staff is suggested as a key improvement.

Interview 8 (Chef Arshad Mehmood, audio 1)

Summary:
Arshad Mehmood is a chef in SEECS mazdoor cafe. Him and his team cook food based on a menu that is already pre planned for each day. They know how many people they need to serve, so they make sure not to cook too much to avoid waste.

They buy supplies from Punjab Raj Store in Karachi Company and vegetables from the local market. They bring fresh supplies a day before cooking, so nothing expires. Two people work in the kitchen, and one of them is always there.

No one from NUST administration manages them, but they stay in touch with staff to report any problems. Everything is going fine, and if an issue comes up, they either fix it themselves or inform higher-ups.

They sell tea for Rs. 20 but don't make any profit because they are paid by the government. They keep track of everything in registers and send daily reports to their supervisor.

The principal of SEECS sometimes checks the food quality. If there's a gas issue, they have extra cylinders ready to use and they forward the complaints to the higher authorities.

Interview 9 (DD Female Hostel, audio 8)

Summary

The mess operations currently have no planned upgrades or expansions due to budget constraints. The primary challenges being faced include students not following the proper dress code, not adhering to meal timings, and wasting food. However, staff-related issues are minimal. The hostel operations oversee cleanliness and decorum alongside meal planning. The menu is decided through a decentralized system, where students participate in discussions, and the results are compiled centrally before finalizing the meal plan. The billing system is manual. Students have to pay in advance each month. To apply for a mess-off, students have to let the management know 2 days in advance. However, they cannot take more than 12 days off; beyond that, they must pay the full charges.

The supply chain for the mess is divided into dry (e.g., ghee, pulses, flour) and wet rations. Orders are placed based on demand, managed by the PLP Directorate to ensure freshness and prevent stockpiling or expiration. There is no automated system in place yet.

The goal is to build a structured, high-efficiency system similar to FMCGs, where demand generation and supply management are streamlined across departments. Some supplies go through tenders, while others are directly managed by hostel authorities. A centralized ration store ensures demand and supply coordination. The need for better management and automation is recognized, but implementation remains a challenge due to system complexity and diversity in requirements.

Interview 10 (Mess Supervisor female hostel, audio 3)

Summary
In this interview, Mess supervisor Pervaiz gives a detailed overview of how the mess system operates. Staff authorization is based on the strength of students, generally one cook and one waiter is authorized per 50 students. There are 9 waiters and 2 dishwashers. Student complaints are received through the complaint register. Fresh ingredients come everyday. Quality, freshness and hygiene is not compromised. Food is prepared again if it's insufficient. A sanitary worker is always present in the kitchen to clean the kitchen as soon as it gets dirty. Some students are mischievous, they try to pressurize the staff. If a complaint is valid, it goes to the AD and then the DD before it's acted upon.

People from all over Pakistan study in NUST and every one has a different perception of taste. This explains why some may like a certain dish and some won't. In Mess supervisor's opinion, it would be very difficult to implement an online system to replace the manual mess management. Contracts are finalized after the higher management approves food quality. After every 3 months, a mess meeting takes place where proposals are discussed and decisions take place. The menu is replaced every 3-4 months. Every mess gets its own ration.

Finance makes payment through PLP when food is bought. Store staff receive the food from the contractors. The food demand for each hostel mess is submitted through a form. Managing students is the hardest part of hostel mess management. Hostel management eats the same food as the students. Hostel management works very hard everyday to ensure students have a comfortable stay so minor mistakes should be overlooked sometimes.

3.2 Key Insights from Interviews

Interview 1 (student 1, audio 11)

Key terms:
- Banking app
- Mastercard
- Mess-off
- Complaint register
- Reminder system

Requirements Highlighted:
- Official mess-off limit being higher than 12 days
- Weekly change in the menu
- Menu customization option for students
- Online system that tracks payments, due dates and sends reminders

Interview 2 (student 2, audio 12)

Key terms:
- Mess bill
- Qalam
- Digital feedback system
- Digital rating system
- Meal preferences

Requirements Highlighted:
- No charge for meals of the day students didn't eat
- A digital feedback system that connects students and management
- A digital rating system to rate food dishes and facilities

Interview 3 (head chef female hostel, audio 7)

Key terms:
- Automatic supply tracking system

Requirements Highlighted:
- No requirements mentioned

Interview 4 (Ayesha hostel manager, audio 4,5,6)

Key terms:
- Cafeteria mess
- Meal plans
- Salary deductions
- Digital rating system
- Payment processing issues

Requirements Highlighted:
- No requirements mentioned

Interview 5 (Rumi hostel mess supervisor, audio 9)

Key terms:
- Food shortage
- NUST hygiene standards
- Staff medical checkups
- Payment processing issues
- NMC
- Mess meeting
- Nurpur
- Non-Muslim Students

Requirements Highlighted:
- Specific meals for students with medical conditions (approved by NMC)
- Ensuring balanced nutrition in menu planning
- Keeping a daily record of food consumption & fresh ration
- Monthly register submission to higher authorities
- Staff monitoring students' meal attendance

Interview 6 (Mess supervisor male hostel, audio 2)

Key terms:
- Gas shortage
- Gas cylinders

- Staff emergency
- Daily Student count
- Meal preparation time

Requirements Highlighted:
- No requirements mentioned.

Interview 7 (Zainab Hostel Manager, audio 10)

Key terms:
- Nust hostels' meal plan
- Mess Billing
- Menu sequence
- Token system
- Staff shortage
- Biometric attendance

Requirements Highlighted:
- Sufficient number of sanitary, management and mess staff
- Better sequenced menu with adequate proportions for protein, fat, fibre and carbs
- A token system where a token is taken in the morning if the student wishes to avail mess service that day
- A biometric attendance system which is linked directly to the mess billing system

Interview 8 (Chef Arshad Mehmood, audio 1)

Key terms:
- Karachi Company
- Government of Pakistan
- SEECS Principal

Requirements Highlighted:
- No requirements mentioned

Interview 9 (DD Female Hostel, audio 8)

Key terms:
- Affordable Meal pricing
- Operational efficiency
- Budget Constraints
- Staff shortage
- Decentralized meetings
- SKUs

- SAP
- FMCGs
- PLP
- Supply chain management system
- Central Ration Store System

Requirements Highlighted:
- Proper adherence of dress code by students
- Strict mess timings
- Less food wastage by students

Interview 10 (Mess Supervisor female hostel, audio 3)

Key terms:

- Cultural preference
- Nust accommodation
- PMO
- PLP
- Post-ramadan menu
- Demand form

Requirements Highlighted:
- Reading of NUST SOPs by the students
- A proper online mess management system

4. Functional Requirements

1. Students (Hostel Residents) – Meal Preferences, Billing, and Complaints

Functional Requirements

<u>User Registration & Profile Management</u>

What It Does:

- Students can register with details such as Student_ID, Name, Roll_Number, Room_Number, and Bank_Account_Details (attributes in our ERD).
- Each student will be allowed to control profile information such as being able to view their billing record, mess-off requests, view pending, answered, and complaints. They will also be able to rate meals for feedback on each day's meals.

Justification:

- Personal profiles will enable students to track all this information in one place, reducing discrepancies.
- With 44% of students reporting billing issues, this system will ensure an accurate reflection of data.
- As 92.3% of students are interested in a meal rating system, this will be implemented to ensure feedback is taken seriously and continuously.

ERD Link:

- Student Registration Entity

<u>Biometric Based Meal Attendance Verification</u>

What It Does:

- Adds biometric technologies to automatically track student meal attendance and authenticate mess-off entries.

Justification:

- Saves time and reduces errors or fraud in attendance logging and billing with accurate meal tracking, as highlighted by the Hostel DD in interviews.

ERD Link:

- Utilizes StudentStrength attribute from DailyStrength entity.

Meal Registration & Customization

What It Does:

- There is a weekly menu where students can choose their meals from.
- Provides real-time updates on available options and meal ingredients.

Justification:

- With 41.67% of students complaining about taste-related problems, this customization will help personalize meals.
- Students can also avoid allergic reactions by choosing ingredients in advance.

ERD Link:

- Associated with the Mess Menu, Meal Registration entities.

Mess-Off Management

What It Does:

- Offers a space to request a mess-off with start and end dates and displays approval status.
- Automatically adjusts billing so students are not charged for meals they do not eat.

Justification:

- This automates the process, ensuring no discrepancies in billing, as manual mess-off requests currently have no electronic record.

ERD Link:

● By the Mess-Off Request entity (with Request_ID, Student_ID, Start_Date, End_Date, and Approval_Status).

Billing System

What It Does:

● Automates monthly bill creation, enables payment via online, cash, and card modes. It will include mess-off adjustments.
● Gives an open view of charges and payment status (Paid/Unpaid).

Justification:

● As 44% of students face billing problems, an automated system is more accurate and less prone to errors.

ERD Link:

● Mapped to the MessBilling entity (with Bill_ID, Student_ID, Month, Amount, Payment_Status, Payment_Date).
●

Complaint & Feedback System

What It Does:

● Enables students to register complaints about meal quality, billing, or hygiene problems.
● Provides a real-time status update on complaints (Pending, Resolved, or Ignored) and incorporates a meal rating system for feedback.

Justification:

● Approximately 80% of students have concerns about how difficult it is to file complaints. This system will ensure timely follow-ups, improving overall satisfaction.

ERD Link:

● In direct relation to the Complaints entity.

Meal Rating System

What It Does:

- Allows students to rate meals from 1-5 and leave extensive comments for taste, quality, and variety.
- Gather information to drive improvements in menu planning and meal preparation.

Reasoning:

- With 28.33% displeased with menu issues and 41.67% with taste issues, a rating system offers actionable insights for improvements.

Token-Based Meal Registration

What It Does:

- Releases tokens for every meal (e.g., dinner), where students must obtain a token to sign up for that meal, so only signed-up meals are prepared and charged.

Justification:

- 44% of students face billing issues; this system reduces overproduction and ensures students are only charged for meals they attend.

ERD Link:

- Includes Student and MessMenu entities.

Integrated Notification & Real-Time Updates

What It Does:

- Provides real-time notifications about mess-off status, billing updates, menu changes, and complaint closures.

Justification:

- Timely communication helps clear up billing and meal planning uncertainties and answers grievances on slow updates.

ERD Link:

- Not a standalone entity, but it integrates with data from Billing, and Complaint entities.

2. Faculty (Faculty Hostel & Cafeteria Users) – Faculty Meal Plans, Billing, and Service Expectations

Functional Requirements

Feedback & Service Quality Monitoring

What It Does:

- Faculty can rate the meals and service quality, and they can also view administrative dashboards for timely follow-up.

Justification:

- Ensures that service expectations are met and addresses repetitive issues (such as poor meal variety or service quality).

ERD Link:

- Makes use of the Faculty and Complaint entities.

Real-Time Notifications

What It Does:

- Sends faculty notifications about menu updates and bills directly.

Justification:

- Provides timely alerts, which is especially useful as faculty members are busy and need prompt updates.

ERD Link:

- Though not a main data entity, notifications can be facilitated by referring to the MessMenu, Billing, and Complaint entities.

3. Mess Staff (Chefs, Servers, Store Managers) – Meal Preparation, Inventory Management, and Meal Tracking

Functional Requirements

Inventory Management System

What It Does:

- Manages real-time inventory levels, expiration dates, and ingredient procurement records.
- Notifies staff when stock levels drop below a threshold.

Justification:

- Real-time monitoring helps avoid shortages or wastage, ensuring consistent quality and minimizing costs.

ERD Link:

- Linked directly with the Ingredient, Procurement, and Storage tables.

Meal Preparation Tracking

What It Does:

- Tracks planned vs. prepared meal quantities and records extra servings and wastage. It provides a dashboard for daily performance, including meal ratings.

Justification:

- Monitoring preparation specifics can identify issues like undercooked food and soggy meals, which contribute to 41.67% of taste-related problems.

ERD Link:

- Coupled with the MessMenu, MessStaff, and DailyStrength entities.

4. Mess Administrators – Scheduling, Complaints, and Financial Records

Functional Requirements

Digital Record-Keeping Module

What It Does:

- Computerized the gathering of operational data (attendance, food wastage, inventory usage) and provides reports to assess performance.

Justification:

- Ensures accountability and supports better decision-making in mess operations.

ERD Link:

- Consolidates DailyStrength, MessMenu, MessBilling, and Complaint entities' data.

5. NUST Management – Budgeting, Operational Constraints, and Long-Term Planning

Functional Requirements

Budgeting Dashboard

What It Does:

- Compiles fiscal data from billing, payments, and operational costs.
- Provides trend analysis and forecasting for budgeting.

Justification:

● Supports strategic decision-making by addressing budgeting and financial constraints discussed in interviews.

ERD Link:

● Merges information from the MessBilling entities.

Operational Performance Monitoring System

What It Does:

● Provides real-time performance dashboards for meal quality scores, hygiene scores, and complaint resolution times.
● Allows management to set benchmarks and track progress.

Justification:

● Helps ensure food quality and hygiene standards are met, addressing concerns about expired food and illness among students.

ERD Link:

● Retrieves data from Mess, Staff, and Complaint objects.

SUMMARY

Functional Requirement	Stakeholders Affected	Justification
User Registration & Profile Management	Students (Hostel Residents)	- **44% of students** have reported billing issues. - **92.3%** want a meal rating system to improve food choices.

Biometric Based Meal Attendance Verification	Students (Hostel Residents), Mess Staff	- The **Hostel Deputy Director** emphasized that this system would save time and reduce fraud.
Meal Registration & Customization	Students (Hostel Residents)	- **41.67%** of complaints were about food being tasteless or soggy. - **17 responses** highlighted concerns over meal variety and repetition.
Mess-Off Management	Students (Hostel Residents), Mess Administrators	- **10% of students** are unhappy about paying for meals they don't eat.
Billing System	Students (Hostel Residents), Mess Administrators	- **44% of students** experience billing problems.
Complaint & Feedback System	Students (Hostel Residents), Mess Administrators	- **80% of students** struggle with the complaint process. - The average rating given to the system is just **1.75**.
Meal Rating System	Students (Hostel Residents), Mess Staff	- **28.33%** are unhappy with the menu options. - **41.67%** dislike the taste of the food.
Token-Based Meal Registration & Attendance	Students (Hostel Residents), Mess Administrators	- **44% of students** report billing issues . - The **Zainab Hostel Manager** pointed out efficiency benefits.
Integrated Notification & Real-Time Updates	Students (Hostel Residents), Mess Administrators, Faculty	- While no direct stats exist, this system helps resolve confusion and uncertainty.
Feedback & Service Quality Monitoring	Faculty (Faculty Hostel & Cafeteria Users)	- Based of student interview and survey feedback
Real-Time Notifications & Communication	Faculty (Faculty Hostel & Cafeteria Users)	- No specific statistics available.
Inventory Management System	Mess Staff (Chefs, Servers, Store Managers)	- Real-time tracking minimizes shortages and reduces waste.

Meal Preparation Tracking	Mess Staff (Chefs, Servers, Store Managers)	- **41.67% of taste-related complaints** stem from issues like undercooked food.
Staff Scheduling & Attendance Management	Mess Staff (Chefs, Servers, Store Managers)	-Based of interview feedback
Real-Time Operational Issue Reporting	Mess Staff (Chefs, Servers, Store Managers), Mess Administrators	- Immediate issue reporting helps prevent service delays and maintain food quality.
Digital Record-Keeping Module	Mess Administrators	- Based of interview and survey feedback
Centralized Scheduling & Meal Quantity Planning	Mess Administrators	- The **Hostel DD** noted problems with latecomers and excess food waste.
Complaint & Feedback Resolution Dashboard	Mess Administrators	- **80% of students** face challenges when trying to file complaints.
Budgeting Dashboard	NUST Management	- Addressing financial constraints was a key concern in interviews.
Operational Performance Monitoring System	NUST Management	- Hygiene issues were flagged during interviews.
Real-Time Gas Supply Monitoring	NUST Management, Mess Staff	- alerts notify chefs about gas shortages, so smooth meal preparation.

5. Identification of Entities, Attributes, and Relationships

5.1 Key Entities and Their Attributes

Student

- *Student ID*
- Name

- Gender
- Room Number
- Meal Plan ID
- Billing Status
- Complaints

Faculty

- *Faculty ID*
- Name
- Department
- Meal Plan ID
- Billing Status
- Daily Strength

Daily strength

- *Day ID*
- Hostel ID
- Date
- Student Strength
- Faculty Strength
- Required Meal Amount

Complaint

- *Complaint ID*
- Student/Faculty ID
- Description
- Status
- Date Submitted

Room

- *Room ID*
- Hostel ID
- Capacity
- Availability

Inventory

- *Item ID*
- Item Name
- Quantity Available
- Last Restocked Date

Mess Staff

- *Staff ID*
- Name
- Designation
- Contact Number
- Shift Timings
- Hostel ID
- Supervisor ID

Mess Supervisor

- *Supervisor ID*
- Hostel ID
- Name
- Contact Number
- Shift Timings

Mess Billing

- *Bill ID*
- User ID
- Amount
- Payment Status
- Due Date

Mess Menu

- *Menu ID*
- Date
- Meal Type
- Item List

Mess Meeting

- *Meeting ID*
- Supervisor ID
- Agenda
- Key Decisions

Mess Meeting Participants

- *Participant ID*
- Meeting ID
- Faculty ID
- Student ID

- Staff ID
- Date

Meal Registration

- *Registration ID*
- Student ID
- Menu ID
- Date
- Status

Operational Constraints

- *Constraint Type ID*
- Budget Constraint
- Staff Constraint
- Conduct Constraint

Mess Off Request

- *Request ID*
- Student ID
- Faculty ID
- Start Date
- End Date
- Approval Status

Mess Billing

- *Bill ID*
- Faculty ID
- Amount
- Student ID
- Due Date
- Payment Status
- Refund Status

Hostel Staff

- *Staff ID* (Primary Key)
- Hostel ID (Foreign Key)
- Role
- Contact

5.2 Relationships Between Entities

. Hostel - Rooms

- **One-to-Many** → A *Hostel* **contains** multiple *Rooms*

2. Hostel - daily strength

- **One-to-Many** → A *Hostel* **delivers** multiple *students as daily strength*

3. Hostel - Hostel Staff

- **One-to-Many** → A *Hostel* **manages** multiple *Hostel Staff members*

4. Hostel - mess menu

- **many-to-Many** → *Hostels* **implement** multiple *mess menus*

5. hostel - mess staff

- **one-to-many** → hostel **employees** multiple mess staff

6. hostel - mess supervisor

- **one-to-One** → one hostel **belongs to** one mess supervisor

7. Mess meetings - Hostel

- **Many-to-One** → Multiple *Mess meetings* **are organised by** one *Hostel*

8. faculty - Meal registration

- **many-to-many** → multiple members of the faculty **registers in** for multiple meals

9. Faculty - Mess Off

- **One-to-Many** → A *Faculty member* **can request** multiple mess offs

10. faculty - Mess Bills

- **One-to-Many** → members of the faculty **pay for** multiple *Mess Bills*

11. faculty - complaints

- **One-to-many** → faculty **can make** multiple *complaints*

12. faculty - rooms

- **Many-to-many (optional)** → *faculty members* **live in** rooms

13. faculty - mess meeting participants

- **one-to-many** → *faculty* **are enrolled in** multiple *mess meetings*

14. students - rooms

- **Many-to-One** → Multiple *students* **live in** one room

15. students- complaints

- **One-to-Many** → A *student* **makes** multiple *complaints*

16. Students-mess bill

- **one-to-many** →students **pay** multiple *Mess bills*

17. Mess Meeting Participants - Student

- **Many-to-One** → Multiple *Students* **enrolled in** one *Mess Meeting*

18. Mess off request- student

- **Many-to-One** → Multiple *Mess off request* **requested by** one *student*

19. student - Mess Registration

- **Many-to-many** → Multiple students **can register for** multiple meals

20. Mess menu - meal registration

- **one-to-many** → one mess menu **provides menu for** multiple *meal registration*

21. Mess supervisor - mess staff

- **one-to-many** → A *Mess supervisor* **supervises** multiple mess staff

22. Mess supervisor- operational constraints

- **one-to-many** → A *Mess supervisor* **looks after** multiple operational constraints

23. Mess meetings - Mess Supervisor

- **Many-to-One** → Multiple *Mess meetings* **are supervised by** one *Mess Supervisor*

24. inventory- mess supervisor

- **Many-to-One** → Multiple *inventories* **are managed by** one *mess supervisor*

25. Mess meeting participants - mess staff

- **one-to-many** → one mess staff member **participates in** multiple *mess meetings*

26. Mess meeting - mess meeting participants

- **One-to-Many** → A *mess meeting* **has multiple** *Mess meeting participants*

6. Analysis of Transaction Management Issues

Many-to-Many Relationship

Mess Menu and Hostel

Problems:

- If a mess menu is changed for one hostel but not for all the other hostels sharing the same mess, inconsistencies will be created.
- Duplicate menu items will be seen when hostels sharing the same mess but having different menus use the same mess.
- When two hostels try to change a common menu at the same time, there may be conflicts regarding menu items and charges.
- Having several Faculty updating the menu simultaneously can result in lost updates or out-of-sync menu states. This could result in overbooking when meal orders and menu updates overlap.

Solutions:

- **Consistent Menu Updates:** Implement version control to log menu changes and update all related hostels with synchronized updates uniformly.
- **Constraints in Data:** Set rules that will require menu changes to be synchronized across every connected hostel.
- **Concurrence Control:** Have a voting system to avoid conflict.
- **Menu Update Tracking:** Maintain records of all changes in case of conflicts.

Student and Mess Registration

Issues:

- A student might be registered for multiple mess facilities due to improper constraints, causing duplicate registrations.
- When meal plans or charges are revised but not reflected in student records, improper charges or outdated menu items may result.
- Transfers between mess halls can lead to billing problems if students don't unregister from the old mess correctly.
- Over-enrollment may occur when multiple students register for an already full mess at the same time.

Solutions:

- **Data Consistency:** Implement unique constraints to prevent duplicate registrations and use foreign keys to ensure students are properly referenced in mess-hostel relationships.
- **Concurrency Control:** Make sure that registrations are processed individually to prevent conflicts or unintended changes.
- **Conflict Resolution:** Maintain records of all modifications to monitor updates and utilize automatic checks to avoid double bookings or meal assignment errors.

Mess Meetings and Participants

Issues:

- A participant can be inserted into the same meeting multiple times due to incorrect settings in the system rules.
- Meetings can occur without participants, leading to incomplete records.
- If a meeting is deleted without updating participant records, unused data can be left in the system.
- Scheduling conflicts may occur if a participant is assigned to multiple meetings simultaneously.
- When two users update the participant list or meeting agenda at the same time, changes may overwrite one another, causing lost information.
- Large participant registration processing can cause system delays.

Solutions:

- **Data Integrity:** Use composite keys (MeetingID + ParticipantID) to prevent duplicate registrations and enforce foreign key constraints to ensure valid relationships.
- **Concurrency Control:** Track alters timestamps for concurrent updates.
- **Conflict Prevention:**
  - Prevent scheduling conflicts before approving registrations.
  - Restrict meeting modifications to specific roles (e.g., supervisors can modify agendas).
- **System Optimization:** Implement batch processing for bulk participant registrations and improve database performance with indexing on MeetingID and ParticipantID.

One-to-Many Relationships

Student and Complaints

Problems:

- Without proper tracking, multiple complaints from the same student may result in duplicate or unresolved cases.
- Concurrent updates by multiple administrators can lead to conflicting complaint statuses or missing information.
- If a complaint is already under process and the student resubmits it, it can lead to delays or confusion in the resolution process.

Solutions:

- Every complaint should be unique to avoid duplicate submissions.
- Allow only one update at a time so that there are no conflicting changes.
- Use timestamps to track complaint history.

Faculty and Mess Requests

Issues:

- Inconsistent approval statuses may arise due to multiple requests from the same faculty member.
- Conflicts may occur if two administrators approve or reject the same request simultaneously.
- Simultaneous request submissions may cause lost requests.

Solutions:

- Make sure every complaint is unique to avoid multiple submissions.
- Permit a single update at a time to prevent conflicting changes.
- Utilize timestamps to monitor complaint history.

Mess Supervisor and Mess Meetings

Issues:

- Double bookings and incorrect participant lists can occur when meetings are scheduled without proper checks.
- Conflicts may arise if multiple supervisors edit the same meeting details simultaneously.
- Unauthorized changes may occur without proper controls.

Solutions:

- Enforce scheduling rules to prevent duplicate or conflicting bookings.

- Allow only authorized users to make changes.
- Assign specific roles with defined permissions.
- Enable real-time validation.

Mess Supervisor and Operating Restrictions

Issues:

- Various supervisors with different rules can give inconsistent restrictions.
- Revisions to supply limits without revising mess operations will result in shortage or surplus inventory.
- Making the same rule at the same time creates duplicate settings.
- Ill-defined rules may result in inconsistent mess operations.

Solutions:

- Treat all rules from a single system to prevent conflict.
- Make just one update at a time to minimize errors.
- Track everything that gets changed to keep history and correct problems.

Student and Mess Billing

Issues:

- Unless meal consumption records are properly associated with student accounts, billing errors (overcharges or unpaid fees) can occur.
- Concurrent updates to billing records can lead to incorrect balances.
- Concurrent payments and meal charges can lead to duplicate or missing transactions.

Solutions:

- Ensure billing changes are either processed fully or canceled in the event of an issue.
- Check real-time balances before processing payments to avoid errors.
- Use an automated system to catch and correct billing mistakes.

One-to-One Relationships

Mess Supervisor and Hostel

Problems:

- Unassigned hostels can lead to untapped mess activities.

- Failing to update hostel records upon supervisory changes will lead to stale data.
- Assure a single supervisor per hostel with unique constraints.

Solutions:

- Enforce strict one-to-one associations with distinct constraints.
- Ensure data integrity by applying foreign key constraints which will update or delete related information automatically.
- Prevent simultaneous editing of the same hostel-supervisor association by various users.
- Verify assignments in real time to eliminate duplication or collisions.
- Store activity logs to trace changes.

7. Entity-Relationship Diagram (ERD)

(click on the image to see a higher resolution version and be able to zoom in)

8. Relational Data Model

1. Hostel Table

Attributes: hostelID (Primary Key), Name, Location, Capacity, Warden_ID

The **Hostel Table** stores information about each hostel, including a unique attribute (hostelID) as primary key , the hostel's name, location, capacity, and the warden responsible .

2. Room Table

Attributes: RoomID (Primary Key) ,hostelID (Foreign Key),Capacity, Availability

The **Room Table** contains details of the rooms in each hostel, such as RoomID,respective hostelID, capacity, and availability status.Here in this table hostelID is foreign key which shows that there is a relationship between Room table and hostel table and In one to many relationship between them.

3. Student Table

Attributes: StudentID (Primary Key), RoomID (Foreign Key), Name,Semester, ContactNumber, AdmissionDate, MessRegistrationStatus

The **Student Table** holds data about students, including their unique attribute(StudentID), the room they are assigned (RoomID), name, semester, contact information, admission date, and mess registration status.Here we can see RoomID is included as Foreign key which shows that there is a relationship between these two tables.

4. Faculty Table

Attributes: FacultyID (Primary Key),RoomID (ForeignKey), Name, JobTitle, ContactNumber,   AdmissionDate

The **Faculty Table** stores details about faculty members, including their FacultyID, room assignment, name, job title, contact, and admission date. Here we can see RoomID is included as Foreign key which shows that there is a relationship between these two tables.

5. Complaints Table

Attributes: ComplaintID (Primary Key),StudentID (Foreign Key),FacultyID (Foreign Key), Description,Status,Resolution_Details

The **Complaints Table** records complaints by students or faculty, identified by ComplaintID. Each complaint includes details of the person who made the complaint (StudentID or FacultyID), a description of the issue, status, and resolution details. Here we can see StudentID is included as Foreign key also FacultyID which shows that there is a relationship of complaints table to both Student and Faculty Tables (Both are one to many) .

6. DailyStrength Table

Attributes: DayID (Primary Key),hostelID (Foreign Key),Date,StudentStrength, FacultyStrength, RequiredMealAmount

The **DailyStrength Table** maintains a record of the student and faculty strength for each hostel on a given date, along with the number of meals required. Here we can see hostelID is included as Foreign key which shows that there is a relationship between DailyStrength and Hostel table and it is one to many.

7. MessMenu Table

Attributes: MessID (Primary Key),hostelID (Foreign Key), Name, Meal_Type , Item_List

The **MessMenu Table** captures information about messes, including MessID, associated hostelID, name, type of meal provided, and the list of food items. Here we can see hostelID is included as Foreign key which shows that there is a relationship between MessMenu and Hostel table and it is many to many.

8. MessStaff Table

Attributes: StaffID (Primary Key), Name ,Designation, ContactNumber, Shift_Timings,hostelID (Foreign Key),SupervisorID (Foreign Key)

The **MessStaff Table** stores details of mess staff, including StaffID, name, designation, contact number, shift timings, associated hostelID, and supervisor details. Here we can see hostelID and SupervisorID are included as Foreign keys which shows that there is a relationship between the MessStaff table to both the table with mess supervisor it is one to many and with hostel it is also one to many as shown in the ERD.

9. MessSupervisor Table

Attributes: SupervisorID (Primary Key),hostelID (Foreign Key), Name, ContactNumber, Shift_Timings

The **MessSupervisor Table** provides details of the mess supervisors, such as their SupervisorID, hostelID, name, contact number, and shift timings. Here we can see hostelID is included as Foreign key which shows that there is a relationship between the MessSupervisor table and Hostel table , the relationship is one to one.

10. MessMeeting Table

Attributes: MeetingID (Primary Key),SupervisorID (Foreign Key),ParticipationID (Foreign Key), Agenda , KeyDecisions,Date

The **MessMeeting Table** contains meetings conducted by supervisors, including the meeting topic, key decisions, and the participation of students, faculty, or staff. Here we can see participantID , SupervisorID areas included as Foreign keys which shows that there is a relationship of MessSMeeting table with both MessSupervisor and MessMeetingParticipants table , with MessSupervisor Table the relationship is one to many and with MessMeetingParticipants it is many to many.

11. MessMeetingParticipant Table

Attributes: ParticipantID (Primary Key),MeetingID (Foreign Key),FacultyID (Foreign Key), StudentID (Foreign Key), StaffID (Foreign Key),Date

The **MessMeetingParticipant Table** contains the data participants in each meeting, whether they are faculty, students, or mess staff, identified by ParticipantID. Here we can see MeetingID , FacultyID ,StaffID area included as Foreign keys which shows

that there is a relationship of MessSMeetingParticipant table with all three tables with MessMeeting Table the relationship is many to many , with Student and Faculty table it is one to many.

12. HostelStaff Table

Attributes: StaffID (Primary Key),hostelID (Foreign Key), Role,Contact, ShiftTimings

The **HostelStaff Table** tracks hostel staff information, including their StaffID, role, contact details, shift timings, and the hostel they work in. Here in this table hostelID is foreign key which shows that there is a relationship between HostelStaff table and hostel table and In one to many relationship between them.

13. MessBilling Table

Attributes: BillingID (Primary Key),FacultyID (Foreign Key),StudentID (Foreign Key) , Date,Amount,PaymentStatus,RefundStatus

The **MessBilling Table** contains billing information for both students and faculty, detailing the amount charged, payment status, and any refund details. Here we can see that studentID and FacultyID as foreign keys showing that there is a relationship of MessBilling Table with both the tables. It is one to many relationships.

14. MessOffRequest Table

Attributes: OffRequestID (Primary Key),StudentID (Foreign Key), Date, Status, ApprovalStatus

The **MessOffRequest Table** has all the student's requests to get mess off services for specific periods, including the approval status. Here we can see that studentID as foreign keys showing that there is a relationship between the MessOffRequest Table with Student table and the relationship is one to many.

15. Inventory Table

Attributes: SupplyID (Primary Key),SupervisorID (Foreign Key) ,ItemName ,Quantity ,SupplierName, DateReceived, ExpiryDate

The **Inventory Table** monitors supplies in the mess, recording the item name, quantity, supplier, and details of when items were received and expired date of items.Here we can see that SupervisorID is included as Foreign Key showing a relationship between inventory and MessSupervisor Table and the relationship is one to many

16. MealRegistration Table

Attributes: RegistrationID (Primary Key),Menu_ID (Foreign Key),StudentID (Foreign Key), FacultyID (Foreign Key),   Date,Status

The **MessRegistration Table** keeps information of student registrations for mess services.Here in this table we can see that the attributes Menu_ID ,FacultyID and StudentID are Foreign Keys showing a relationship of the MealRegistration table with MessMenu ,Faculty and Student Tables.With MessMenu table it is one to many relationship and with Student and Faculty it is many to many relationship.

17. Operational Constraints Table

Attributes: Constraints (Primary Key), SupervisorID(Foreign Key), BudgetConstraints, AvailabilityConstraints, ConductConstraints

Operational Constraints Table stores various constraints related to the mess operations, such as budget, availability, Student and staff conduct e.g. dressing limitations.Here we can see SupervisorID as Foreign Key showing that there is one to many relationship between OperationalConstraints and MessSupervisor table.

Here in relational model each entity of ERD is represented as a table, the attributes of table mentioned as primary key are used to uniquely identify each tuple in a table and the attributes mentioned as Foreign Key are used to link a table to another table showing a relationship between them e.g. There is a many to one relationship

between Hotel and Student table and subsequently other tables are also sharing relationships as shown in ERD.

9. Conclusion

Thus this report strongly suggests that implementing the proposed solutions would greatly benefit students and the faculty. The management system would provide real time updates to the administrators and managers so they can make the mess a better experience for everybody involved. Additionally, the ERD shows how all the different components of the mess are interwoven and hence all of them need to work in collaboration for a smooth running operation.

9.1 Summary of Findings

All the surveys conducted and interviews taken point to a great dissatisfaction among the students for the lack of administration in the mess caused by a lack of coordination. Hence a more centralized approach would be beneficial to every party involved. The relational data model highlights how primary and foreign keys establish relationships between different entities to reduce data inconsistencies and ensure a seamless flow. This report puts into view the requirements for this system to be functional

- biometric attendance
- automated billing
- meal customization
- a structured complaint system

The management system would provide the mess with a valid database which through its ACID properties will ensure data integrity and concurrency.

9.2 Future Considerations

1. **Mobile app development :** making an interactive mobile application by which students can check menus, provide feedback and issue complaints.

2. **IoT integration :** inclusion of digital menus, automated attendance system, digital inventory tracking can take the mess management system to another level.

3. **Enhanced Security :** in the future the system should be equipped with robust security measures and cloud protection so all the data is safe from external threats.

4. **AI tools and chat box :** ai chatbot to cater to all user needs so they can navigate through the application/ website better.

5. **Dietary management:** Users should be able to have specific meal suggestions based on their health and bmi based on calorie tracking, allergy warnings and personal preferences.

6. **Facial Recognition softwares :** This would help in digitized attendance for the mess to avoid any physical contact.

7. **Feedback based menu selection :** this would make the mess system more inclusive by eliminating less popular dishes and upvoting better rated dishes.

8. **Sustainability initiatives :** providing energy efficient renewable energy powered kitchens to reduce energy consumption and carbon footprint.

10. References

We have not taken any information, nor used any images or data from external sources.

All our claims are based on our interviews with transcripts in the appendix section and audios attached in the zip file

A summary of the survey results can also be found at the end of this report

11. Appendix: Full Interview Transcripts

Following are the transcripts of stakeholders (hostelite students, mess staff, mess administrators, faculty, nust management):

Interview 1 (student 1, audio 11)

Ayesha: How do you currently register for your mess bills?

Student 1: Currently, we can submit our mess bills through banks, specifically Askari Bank. If we want to pay online, we can use any banking app, but there's a requirement—our ATM card must be affiliated with Mastercard.

Ayesha: How satisfied are you with the mess system so far?

Student 1: The mess system is fine overall, but there are some issues. If we want to go home or stop using the mess facility, we have to submit a request to discontinue it. Only after approval does the mess get discontinued. For example, if I go home for a week and return, my first day back at the mess is not considered an "off-day." Also, if I want to stay at home for half a month, the official mess-off limit is only 12 days. If I stay beyond that, the extra days are not counted as mess-off.

Ayesha: Would you prefer the mess menu to change weekly, or should it remain the same throughout the year?

Student 1: I would prefer a weekly change because the same food is repeated again and again. It gets boring, so new menu items should be added occasionally.

Ayesha: Have you or anyone you know faced issues while submitting the mess bill? For example, paying but the payment not going through?

Student 1: Yes, my friend experienced this. She accidentally paid using the previous month's challan form. She only realized it when she visited the bank. Because of this mistake, her payment didn't proceed correctly.

Ayesha: Are complaints regarding the mess system addressed properly? Is it easy or difficult to file a complaint?

Student 1: Filing a complaint is easy, but it's not acted upon immediately. There are so many students in the hostel, and everyone has different likes and dislikes. If only one person complains about a dish, the management usually ignores it. But if a majority complains, then they take action.

Ayesha: Do you think students should have the option to customize the menu based on their preferences?

Student 1: Yes, we should have that option. If the majority of students want a particular dish in the menu, the management should cater to their request.

Ayesha: Sometimes students forget to pay their mess bills. Do you think we should have a system that tracks payments, due dates, and sends reminders?

Student 1: Yes, that would be really helpful. If we forget to pay the mess bill, a fine of 5% per day is added after the due date. A reminder system would help us avoid unnecessary fines.

Ayesha: Do you know how you're currently billed for the mess? How much are you charged per day?

Student 1: We're billed based on the number of days we avail the mess. I think it's around Rs. 490 per day.

Ayesha: Do you think future hostel residents should have access to a mess rating system where they can rate and review the food and facilities?

Student 1: Yes, but we need to consider that food preferences vary. The same dish can be liked by one person and disliked by another. Generally, if the food is cooked well, the majority will like it. For example, dishes like Biryani and Pulao are sometimes really good and sometimes not as good.

Ayesha: Would you prefer a digital mess system over the current one? Right now, complaints are filed on paper. Would a digital alternative be better?

Student 1: Yes, a digital system would be much better. Currently, we either complain to the hostel manager or write in the complaint register. But some students hesitate to issue complaints in person. An online system would allow students to file complaints from anywhere, making it easier and more convenient.

Interview 2 (student 2, audio 12)

Ayesha: How do you currently register for meals?

Student 2: The mess bill appears on Qalam, and once we pay it in advance, we are registered for the meals.

Ayesha: How do you usually pay for the meals?

Student 2: Either through online payment or bank deposit. I mostly pay online.

Ayesha: If you have any complaints regarding the mess system, how do you address them?

Student 2: We have a feedback form where we can submit our complaints if needed.

Ayesha: How quickly are complaints addressed?

Student 2: There are usually very few complaints, but any that arise are reviewed annually by a committee.

Ayesha: How frequently do you eat at the mess?

Student 2: I usually skip breakfast, occasionally have lunch when rice is served, and mostly eat dinner.

Ayesha: Have you ever been wrongly charged for a meal you didn't eat?

Student 2: Yes, I'm always charged for breakfast and lunch, even when I don't have them. I would like to avoid those unnecessary charges.

Ayesha: Would a digital feedback system help improve the mess service?

Student 2: Yes, of course. It would make things much more efficient.

Ayesha: Would you be interested in a meal rating system to improve food quality?

Student 2: Yes, definitely.

Ayesha: What is the biggest issue you have with the mess system?

Student 2: Quality isn't a major issue. Our food is better compared to other hostels. However, the main problem is the excessively high bill.

Ayesha: If the mess had a digital system or website, what features would you like to see?

Student 2: First, there should be a rating system for providing feedback. Second, a customization option should be available so we can specify our meal preferences. Eating the same food every week gets boring.

Interview 3 (head chef female hostel, audio 7)

Interviewer: First of all, please introduce yourself.

Head Chef: My name is Rehmat Hussain. I am the head chef at Zainab and Ayesha Hostel. I have been working here for 14 years.

Interviewer: Okay, so how much food do you prepare daily?

Head Chef: We always cook 50–60 meals fewer than the total number of students assigned to us because many students don't come to the mess. This way, food doesn't go to waste.

Interviewer: What do you do if the food runs short sometimes?

Head Chef: We usually keep some extra ingredients, like chicken, so that we can quickly prepare more food if needed.

Interviewer: Or, we sometimes manage by borrowing food from Khadija or Amna Hostel. They also borrow from us when necessary, so we compromise when needed. If we can't get it from them, we cook it ourselves.

Interviewer: What do you do if an ingredient expires? How do you maintain cleanliness?

Head Chef: First of all, we don't stock items that can expire easily. Vegetables are delivered fresh daily, and ration supplies go through checks by three to four people before reaching us, so expired ingredients are not an issue.

Interviewer: Currently, you document inventory manually on paper. Would you prefer an online system that automatically tracks supplies?

Head Chef: Most of our system is already computerized. Our demands, daily food preparation, and other records are all entered into a computer.

Interviewer: Okay, thank you.

Interview 4 (Ayesha hostel manager, audio 4,5,6)

Interviewer: How often do you use the cafeteria mess?
Hostel Manager: I use it three times a day.

Interviewer: Are there different meal plans for faculty?
Hostel Manager: No, there are no different meal plans for faculty.

Interviewer: Are you satisfied with the food variety and quality?
Hostel Manager: Yes, I am satisfied with the food variety and quality.

Interviewer: Are your meal payments handled through salary deductions?
Hostel Manager: We do not pay for the meals.

Interviewer: Have you faced incorrect billing or payment processing issues?

Hostel Manager: No, we have not, because we don't pay for the mess.

Interview 5 (Rumi hostel mess supervisor, audio 9)

Interviewer: Assalam-o-Alaikum. How are you?

Mess Supervisor: Wa Alaikum Assalam. I am fine, you tell me. First of all, I would like to introduce myself. I am the Mess Supervisor, Sadr Hussain, from the **Interviewer:** Assalam-o-Alaikum. How are you?

Mess Supervisor: Wa Alaikum Assalam. I am fine, you tell me.

Interviewer: First of all, I would like to introduce myself. I am the Mess Supervisor, Sadr Hussain Rumi, from the hostel mess. I am doing my duty here as a Mess Supervisor. You can ask me questions related to this, and I will try to answer them.

Interviewer: What is your domain as a Supervisor?

Mess Supervisor: As a Supervisor, my duty is to control the mess and ration. I also have to manage the staff and oversee the ration process. I ensure that students receive their meals in the dining hall. Apart from this, I handle the responsibilities of a Supervisor, including managing the ration supply for ten hostels. We maintain records, which are checked by the AD Messing. I also review the monthly records.

Interviewer: So, are all these hostels under your supervision?

Mess Supervisor: No, I am only responsible for the Rumi Hostel mess. I supervise two dining halls. I have also been assigned as a duty Supervisor by AD Messing. Among the ten hostels, one Supervisor takes charge each month and records the total ration used. We review these records at the end of the month. Each Supervisor manages their own mess.

Interviewer: What is the biggest challenge in running the mess?

Mess Supervisor: That's a good question. There are some challenges in catering. One common issue is food shortage. For example, if we prepare food for 200 people while expecting 250, we ensure that food is not wasted. If food runs short, we borrow from nearby hostels. We avoid keeping excess food to minimize wastage. If any food remains, the staff eats it.

Interviewer: Is everything managed on paper? How do you track the ration?

Mess Supervisor: At Rumi Hostel, we record the monthly ration, which is calculated based on an estimate of 250 people. Sometimes, the actual count is around 230 to 240.

Interviewer: Would a digital system make it easier for you to manage everything online?

Mess Supervisor: You are absolutely right. However, since the system has always been manual, we are used to it. Paperwork is easier for us. Everything is recorded properly. We receive fresh food daily—chicken and vegetables come in daily, while dry food is supplied every 15 days.

Interviewer: How do you check if the food is fresh?

Mess Supervisor: We personally inspect fresh vegetables like tomatoes and onions. We also check chicken and minced meat. Our head cook oversees quality control. If something is not up to standard, we reject it. Our contractors are cooperative and replace any substandard items. We do not compromise on quality.

Interviewer: Do you have a monthly contract with suppliers? How does that work?

Mess Supervisor: As long as the suppliers meet our standards, the contract continues. If students complain, we reconsider the contract.

Interviewer: How can students report complaints about the food?

Mess Supervisor: Previously, we had a complaint register in the dining hall. Now, Mr. DD and Mr. AD have instructed that complaints be recorded through the manager. If any issue remains unresolved, we personally address it.

Interviewer: How do you maintain hygiene while cooking?

Mess Supervisor: NUST has good hygiene standards, Alhamdulillah. Since food safety is critical in catering, we take extra precautions. We ensure cleanliness, control flies and mosquitoes, and maintain sanitary conditions. Our staff wears aprons and caps while cooking to prevent hair or contaminants from getting into the food.

Interviewer: Does each hostel cook its own food?

Mess Supervisor: Yes, every hostel has its own kitchen. For example, we have two dining halls, but our kitchen is shared. This setup is the same for all ten hostels.

Interviewer: How do you divide work among the staff?

Mess Supervisor: We have ten cooks. Five work in the kitchen, while the others handle different tasks, including cooking and baking. Every two to three months, we rotate their roles so they gain experience in different areas.

Interviewer: How do you store food like vegetables and chicken? When do you receive the chicken supply?

Mess Supervisor: We receive fresh chicken daily. However, we keep a reserve of 20 to 25 chickens in case of delays or extra events.

Interviewer: Do you record the number of people who eat different meals, like lentils versus Manchurian?

Mess Supervisor: Yes, we maintain records. For instance, when we serve Chicken Manchurian, we estimate 250 students and order around 50 kg of chicken. We boil 5 to 6 kg separately and cook the rest. If there is a shortage, we use any leftovers from previous meals.

Interviewer: Do you have a medical system for the staff?

Mess Supervisor: Yes, we conduct medical checkups every three months for our cooking staff and keep a record of their health.

 hostel mess. I am doing my duty here as a Mess Supervisor. You can ask me questions related to this, and I will try to answer them.

Interviewer: What is your domain as a Supervisor?

Mess Supervisor: As a Supervisor, my duty is to control the mess and ration. I also have to manage the staff and oversee the ration process. I ensure that students receive their meals in the dining hall. Apart from this, I handle the responsibilities of a Supervisor, including managing the ration supply for ten hostels. We maintain records, which are checked by the AD Messing. I also review the monthly records.

Interviewer: So, are all these hostels under your supervision?

Mess Supervisor: No, I am only responsible for the Rumi Hostel mess. I supervise two dining halls. I have also been assigned as a duty Supervisor by AD Messing. Among the ten hostels, one Supervisor takes charge each month and records the total ration used. We review these records at the end of the month. Each Supervisor manages their own mess.

Interviewer: What is the biggest challenge in running the mess?

Mess Supervisor: That's a good question. There are some challenges in catering. One common issue is food shortage. For example, if we prepare food for 200 people while expecting 250, we ensure that food is not wasted. If food runs short, we borrow from nearby hostels. We avoid keeping excess food to minimize wastage. If any food remains, the staff eats it.

Interviewer: Is everything managed on paper? How do you track the ration?

Mess Supervisor: At Rumi Hostel, we record the monthly ration, which is calculated based on an estimate of 250 people. Sometimes, the actual count is around 230 to 240.

Interviewer: Would a digital system make it easier for you to manage everything online?

Mess Supervisor: You are absolutely right. However, since the system has always been manual, we are used to it. Paperwork is easier for us. Everything is recorded properly. We receive fresh food daily—chicken and vegetables come in daily, while dry food is supplied every 15 days.

Interviewer: How do you check if the food is fresh?

Mess Supervisor: We personally inspect fresh vegetables like tomatoes and onions. We also check chicken and minced meat. Our head cook oversees quality control. If something is not up to standard, we reject it. Our contractors are cooperative and replace any substandard items. We do not compromise on quality.

Interviewer: Do you have a monthly contract with suppliers? How does that work?

Mess Supervisor: As long as the suppliers meet our standards, the contract continues. If students complain, we reconsider the contract.

Interviewer: How can students report complaints about the food?

Mess Supervisor: Previously, we had a complaint register in the dining hall. Now, Mr. DD and Mr. AD have instructed that complaints be recorded through the manager. If any issue remains unresolved, we personally address it.

Interviewer: How do you maintain hygiene while cooking?

Mess Supervisor: NUST has good hygiene standards, Alhamdulillah. Since food safety is critical in catering, we take extra precautions. We ensure cleanliness, control flies and mosquitoes, and maintain sanitary conditions. Our staff wears aprons and caps while cooking to prevent hair or contaminants from getting into the food.

Interviewer: Does each hostel cook its own food?

Mess Supervisor: Yes, every hostel has its own kitchen. For example, we have two dining halls, but our kitchen is shared. This setup is the same for all ten hostels.

Interviewer: How do you divide work among the staff?

Mess Supervisor: We have ten cooks. Five work in the kitchen, while the others handle different tasks, including cooking and baking. Every two to three months, we rotate their roles so they gain experience in different areas.

Interviewer: How do you store food like vegetables and chicken? When do you receive the chicken supply?

Mess Supervisor: We receive fresh chicken daily. However, we keep a reserve of 20 to 25 chickens in case of delays or extra events.

Interviewer: Do you record the number of people who eat different meals, like lentils versus Manchurian?

Mess Supervisor: Yes, we maintain records. For instance, when we serve Chicken Manchurian, we estimate 250 students and order around 50 kg of chicken. We boil 5 to 6 kg separately and cook the rest. If there is a shortage, we use any leftovers from previous meals.

Interviewer: Do you have a medical system for the staff?

Mess Supervisor: Yes, we conduct medical checkups every three months for our cooking staff and keep a record of their health.

Interviewer: Do you have a quota for the number of children you have to take care of?

Mess Supervisor: It depends on the number of students. The student count is sent to the hostel at night, and we prepare food accordingly for the next day. During a strike or unexpected events, we ask the hostel manager or caretaker for an updated student count. We have a lot of experience in handling this, as I have been in this field for over ten years.

Interviewer: If a child has a medical issue and cannot eat lentils, how do you accommodate them?

Mess Supervisor: Absolutely, in such cases, the child's medical condition is reported to us through a chit from NMC. Based on that, we provide a soft diet like bread or khichdi as soon as possible.

Interviewer: What about the cost of ration? Do you manage it, or does someone else handle it? Do you coordinate with the contractor or the AD?

Mess Supervisor: No, we don't manage the cost. Our responsibility is to ensure we receive the right quality of ration, such as ghee, sugar, and flour. We check the quality but are not involved in pricing or payments.

Interviewer: The food made in the faculty mess—is it the same as what's prepared for students?

Mess Supervisor: No, the faculty mess has its own system. Their menu and management are entirely separate from ours.

Interviewer: So, the student menu is decided separately?

Mess Supervisor: Yes, absolutely. Recently, we had a mess meeting where hostel students shared their views, and based on that, a menu was created. This menu runs for six months,

after which another meeting is held to review and update it. The faculty mess operates independently.

Interviewer: If the food is not enough, what do you do? For example, if you have to cook lentils for 100 people but only have enough for 80, what's your plan?

Mess Supervisor: As I mentioned earlier, we estimate the food quantity based on experience. If we expect 100 students, we prepare for around 80, knowing that not everyone will eat the same portion. If a few students are left out, the staff shares their food to ensure everyone gets something.

Interviewer: Since you have been doing this for a long time, do you think any system improvements could benefit both you and the students?

Mess Supervisor: Our current system works fine. Previously, we used to receive ration directly, and we have no complaints. Everything is managed well, and we don't face major problems.

Interviewer: What happens if students complain about food quality?

Mess Supervisor: If there's a complaint, we report it to our Assistant Director, Major Hamid Afzal. He is our point of contact and resolves the issues for us.

Interviewer: Do you maintain a daily record of the food supply?

Mess Supervisor: Yes, we have a register where we document all fresh rations received daily. We record the consumption of oil, ghee, and food prepared for breakfast, lunch, and dinner. At the end of the month, we close the register and submit the data to AD Messing.

Interviewer: After submitting the monthly data, what happens to it?

Mess Supervisor: We compile a messing report and submit it to Mr. AD Messing. This report is for student records. For example, at Rumi Hostel, postgraduate students stay indoors more often, while undergraduate students sometimes eat outside. The overall system is different for them.

Interviewer: Do students often complain about food?

Mess Supervisor: I have been here for a long time, and students are well-mannered. Complaints do happen occasionally, but they are mostly about personal taste—some students prefer spicy food, while others don't. We don't face major issues.

Interviewer: If a student writes a complaint in the mess register, does it go to higher authorities, or do you resolve it at the hostel level?

Mess Supervisor: If a complaint is minor, like undercooked chicken, we address it immediately and ensure it doesn't happen again. Most issues are resolved internally with the manager. If

needed, we escalate serious complaints further. We also manage emotional students carefully to maintain harmony in the mess.

Interviewer: Do you have a quota for the number of children you have to take care of?

Mess Supervisor: It depends on the strength of the students. The strength of students is sent to the hostel at night. We cook food for them the next day. When there is a strike, we ask the hostel manager or caretaker how many students we have. We have a lot of experience in this. I have been here for ten years. I have been in this field before.

Interviewer: If a child has a medical issue, like he can't eat lentils?

Mess Supervisor: Yes, absolutely. The medical issue of the child is given to us by NMC's chit. When we receive the chit stating that a soft diet is needed, we provide it as soon as possible. We offer bread and khichdi as soft diet options.

Interviewer: What is the cost of the ration? Does it come under you, or do you manage it? How many are coming, and how much money do you have to pay for it? Do you talk to the contractor or the AD?

Mess Supervisor: No, we have nothing to do with the cost. Our ration is different. We should receive the correct food ration, including dry items like ghee, sugar, flour, etc. We focus on the quality of the ingredients, not the cost. Our main concern is to ensure the children don't have complaints about food quality.

Interviewer: The food that is made in the faculty mess, is it made there?

Mess Supervisor: That is their own system. The faculties have their own system.

Interviewer: And it is completely different from our menu? Not just cooking but the menu as well?

Mess Supervisor: Yes, absolutely. The menu is their own. Recently, we had a main mess meeting where all the hostel students were present. Their views were taken into account, and based on that, a menu was made. It remains in place for six months, and then another meeting is held to update it. The faculties have their own system.

Interviewer: If the food is not enough, what do you do? Let's say you are making lentils for 100 people, but the food is only for 80. What happens then?

Mess Supervisor: As I told you earlier, our strength is 100, so we cook food for 80 because we know that out of 100 children, not all will eat. We estimate accordingly. If one or two extra remain, the staff eats it. We manage it that way.

Interviewer: Do you think anything should be added to the system to improve it for you and the students?

Mess Supervisor: Our system has been working fine. We receive the ration, and we have no complaints about it. Everything is managed properly.

Interviewer: If students complain that the food is not good, what do you do?

Mess Supervisor: Our assistant director, Major Hamid Afzal, is our channel. We report to him, and he solves our problem.

Interviewer: Do you keep a daily register of food supplies?

Mess Supervisor: Yes, we maintain a register for fresh ration received daily. It includes daily consumption records—how much oil, ghee, and food items are used for breakfast, lunch, and dinner. At the end of the month, we close the register and submit the messing data to Mr. A.D. Messing.

Interviewer: Do all hostels receive their rations separately or together?

Mess Supervisor: Each hostel gets its ration based on the strength of its students.

Interviewer: Do students file complaints about the mess? What happens to those complaints?

Mess Supervisor: If a complaint arises, such as undercooked chicken, we address it immediately and ensure it doesn't happen again. Usually, the problem is solved at the mess level and remains with the manager unless it needs to be escalated.

Interviewer: Do you use packaged yogurt?

Mess Supervisor: No, our milk comes from Nurpur, and we make yogurt ourselves.

Interviewer: Does the mess faculty eat the same food?

Mess Supervisor: Yes, we have the same menu. The mess staff also eats the same food. After the students finish eating, the staff eats. The priority is always the students.

Interviewer: What happens if there is leftover food?

Mess Supervisor: If food is left over in all the hostels, we give it to the staff the next day.

Interviewer: How often does the mess menu change?

Mess Supervisor: The mess meeting is sometimes held after six months or even a year, depending on the season. For example, if the weather changes, the meeting might be scheduled sooner.

Interviewer: How is the menu decided?

Mess Supervisor: During the mess meeting, voting takes place. Students vote on dishes, and the items with the most votes are added to the menu.

Interviewer: Is the nutritional value considered when making the menu?

Mess Supervisor: Yes, we ensure a balanced diet with the right amount of protein, vegetables, and meat.

Interviewer: How is the chicken imported?

Mess Supervisor: We have a contract, and we receive whole chickens, making it easier to check quality. We also use seasonal vegetables.

Interviewer: Do you have any challenges or stories to share?

Mess Supervisor: No major challenges. NUST has good reviews, and I am happy here. I am retired from the army, and the environment is good. They provide whatever we need.

Interviewer: What happens during Ramadan for non-Muslim students?

Mess Supervisor: Our students ensure that non-Muslim students don't face any issues. We save food from Sehri and provide it at the designated time.

Interviewer: Are mess staff shuffled between hostels or remain permanently assigned?

Mess Supervisor: If superiors decide a staff member should be changed, then they are reassigned accordingly.

Interviewer: Is your mess billed separately, or is it included in the facilities?

Mess Supervisor: We only have two facilities: food and accommodation. We do not receive extra payment for overtime.

Interviewer: Is Ramadan work harder for you?

Mess Supervisor: Yes, we don't sleep at night. We have to prepare 200-250 parathas starting at 2 AM.

Interviewer: Your work isn't billed; how much time do you spend working?

Mess Supervisor: We work 24 hours a day. Staff gets five days off per month, but otherwise, we are here full-time because catering is continuous work.

Interviewer: Do students complain about mess timings, especially after Iftar?

Mess Supervisor: No, in our profession, we manage it. Students understand we need time to prepare food and pray.

Interviewer: Can students get a mess off for one or two days?

Mess Supervisor: Yes, we have a mess-off system. Students must notify us two days in advance to adjust ration orders accordingly.

Interviewer: How do you prevent students from eating food when they have opted out of the mess?

Mess Supervisor: Caretakers and managers monitor meal times and follow up if needed.

Interviewer: That's it. Thank you for the detailed answers.

Interview 6 (Mess supervisor male hostel, audio 2)

Interviewer: First of all, how do you get your food? Do you receive it on a monthly basis or every 15 days?

Mess Supervisor: We get it twice a month, every 15 days.

Interviewer: And where do you store the meat? In the freezer?

Mess Supervisor: The meat isn't stored. If meat is on the menu, we receive it the day before. We get it fresh on that day.

Interviewer: I see. And today, what's on the menu?

Mess Supervisor: Today, we have Chicken Manchurian. So, we get the chicken on the same day.

Interviewer: As you know, the hostel has a large number of students. How do you determine the number of students eating and how much food to prepare?

Mess Supervisor: Our manager informs us about the expected number of students on a daily basis.

Interviewer: Okay, so you receive the count daily. What happens if you run short on food?

Mess Supervisor: That doesn't happen. We prepare food based on the expected number of students. If the food runs short, we can make more if needed.

Interviewer: Sometimes, students don't come for lunch. Do you keep track of that?

Mess Supervisor: Yes, we already know that many students don't eat lunch. We cook accordingly and prepare more food only if needed.

Interviewer: So, food is never wasted or made in excess?

Mess Supervisor: No, it's never more than required. We don't have time to make extra food or waste it. If the food runs short, we can always prepare more.

Interviewer: When do you start preparing dinner? Dinner starts at 7:30 PM, so when do you begin cooking?

Mess Supervisor: We start at 11:00 AM.

Interviewer: Is that because of fasting?

Mess Supervisor: No, I was referring to normal days. We prepare food two, three, or even four times a day, depending on the situation and the menu—whether it's rice or roti.

Interviewer: Do you ever face issues like gas shortages? If so, how do you report them?

Mess Supervisor: We have gas cylinders. If there's an issue, we notify the relevant authorities two to four days in advance.

Interviewer: If you have a complaint, do they document it?

Mess Supervisor: Yes, they write it down.

Interviewer: How many staff members do you have, including cooks and waiters?

Mess Supervisor: We have nine cooks and nine waiters.

Interviewer: Are all nine cooks available at all times?

Mess Supervisor: Yes, but we also take leave when needed.

Interviewer: What happens if someone has an emergency?

Mess Supervisor: We manage accordingly.

Interviewer: If you face any problems in the kitchen, how do you report them?

Mess Supervisor: We inform our seniors and explain the issue in detail.

Interviewer: Regarding the student count that the manager provides—does he inform you verbally or in writing?

Mess Supervisor: He informs me in writing every day.

Interviewer: Okay, that's all. Thank you.

Interview 7 (Zainab Hostel Manager, audio 10)

Interviewer: Assalamualaikum.
Hostel Manager: Walaikumassalam.
Interviewer: How are you?
Hostel Manager: Alhamdulillah, I'm good.
Interviewer: I have some questions for you as faculty at NUST Hostels. What are your expectations from NUST Hostels regarding MESS food?
Hostel Manager: Expectations are very high, but it's obvious that it's not like home. So, it's just so-so.
Interviewer: How many times do you use MESS in a week, and how is your experience so far?
Hostel Manager: In a week, I eat food from MESS because we are not allowed to cook our own food. And ordering food from outside is the same thing. It's the same outside and the same inside. So, it's not like home where we can take any other option. That's why we prefer to eat from MESS.
Interviewer: What are your thoughts on NUST Hostels' meal plan? How do you manage it? And is their meal plan easy to use?
Hostel Manager: I wouldn't say it's easy to use. Because it's obvious that when carbs come, they start coming together. When meat comes, they start coming together. I have seen that this time they have tried to involve the students as well so that they can adjust. They are working on separate days for carbs and meat. They have made some changes and are saying that a new menu is coming. So, I hope that it will be good.
Interviewer: If you want to add or remove something from your meal plan or change something, what would it be?
Hostel Manager: I think many people will find this answer very strange, but I don't like their biryani at all. So, I would like to change their biryani. Instead of that, they can give me Pulao once more. That will work.
Interviewer: Have you ever had issues with MESS billing? Have you ever faced incorrect charges or payment delays?
Hostel Manager: No, no. I don't face such issues.
Interviewer: How do you usually pay for your meals? Is the process smooth?
Hostel Manager: No, we don't have a payment system.
Interviewer: If you have any feedback or complaints related to MESS, how do you share them? And what is the response?
Hostel Manager: We call the supervisor directly and discuss the issue with him, or we register our complaint in the complaint registers.

Interviewer: What is the most common issue you face related to MESS? And how do you think it should be fixed?

Hostel Manager: The menu sequence is not that good. So, we are hoping that it will be fixed soon.

Interviewer: If you want to improve anything related to MESS, what would that be? And what is your favorite meal in MESS?

Hostel Manager: The main thing I would like to improve in MESS, which is everyone's concern, is that there should be a token system.

That every student who wants to eat, who wants to consume a meal, should go and take their token and eat.

According to the state, we make food. So, if a student has to eat a meal during the day, they should take the token in the morning.

Take the token in the morning for the day's food. And based on the number of tokens collected, food should be prepared accordingly.

This will also solve the billing issues. Definitely. Because right now, students claim they are not eating the food, but their bills are still generated.

That issue will be reduced to a great extent. And currently, a lot of food is wasted.

From the mess's perspective, they say a large quantity of food is wasted daily. This happens because food is prepared according to a fixed number of students.

For example, if today we have 275 students, food is prepared accordingly. But obviously, not all students go to the mess every day, leading to wastage.

So, to prevent food waste and ensure students don't get extra bills, both issues can be managed through a token system.

Interviewer: I agree. Apart from that, since you are a faculty and manager at NUST Hostel, what are the biggest issues you have to face related to your job from NUST Hostel Management?

Hostel Manager: The biggest issue in hostel management is that the staff is very limited. This is our biggest challenge. Because of the staff shortage, many things cannot be properly managed.

For example, there are fewer sanitary workers, which means we have to compromise on the cleanliness of the hostel. Both the students and we have to manage it ourselves.

Similarly, if we look at the management staff, there is a huge shortage of caretakers.

If one caretaker goes home, we can't take leave ourselves. The burden on the remaining staff increases significantly, making it difficult to manage everything.

Since the student strength is so high, it is impossible to efficiently manage everything with such limited staff.

Interviewer: Okay. So what tools or improvements would make your job easier? What are your requirements that should be implemented?

Hostel Manager: The most important thing is that attendance should be biometric. If they enforce biometric attendance, it will automatically link to the mess billing system.

If students don't mark their attendance, they won't be charged for meals.

If there is an issue with this, then my previous suggestion still stands—implement a token system and biometric attendance. These two measures alone will resolve many of our existing issues.

Interviewer: Okay. Thank you so much.

Interview 8 (Chef Arshad Mehmood, audio 1)

Interviewer: Tell me your name and designation.
Ans (Chef, SEECS Mazdoor Cafe): My name is Arshad Mehmood, and I am a chef.

Interviewer: How do you prepare your food?
Ans (Chef, SEECS Mazdoor Cafe): We have a different menu for each day, so we cook based on that menu. We also know the expected number of customers, which helps us estimate how much to cook.

Interviewer: Does food ever get wasted?
Ans (Chef, SEECS Mazdoor Cafe): It is very unlikely that our food gets wasted.

Interviewer: Where do you get your food supplies from?
Ans (Chef, SEECS Mazdoor Cafe): We get rations from Karachi Company, specifically from Punjab Raj Store, and vegetables from the vegetable market.

Interviewer: Who decides your menu?
Ans (Chef, SEECS Mazdoor Cafe): We decide it on our own.

Interviewer: How often do you bring your supplies?
Ans (Chef, SEECS Mazdoor Cafe): If we have to cook daal on Tuesday, we bring the supplies on Monday and then cook on Tuesday. We follow this pattern for all meals.

Interviewer: How many people work here?

Ans (Chef, SEECS Mazdoor Cafe): We are two people, and one person is always available at all times.

Interviewer: What do you do if ingredients expire?

Ans (Chef, SEECS Mazdoor Cafe): We don't bring excessive supplies, so nothing gets expired.

Interviewer: Does someone from NUST administration manage you?

Ans (Chef, SEECS Mazdoor Cafe): No one directly manages us, but we stay in contact with the staff to report any issues to the higher authorities.

Interviewer: Do you want to improve anything here?

Ans (Chef, SEECS Mazdoor Cafe): Everything is running fine. If we have any issues, we resolve them, and if they are beyond our control, we report them.

Interviewer: You are selling tea at Rs. 20. How do you make a profit?

Ans (Chef, SEECS Mazdoor Cafe): We don't take any profit. We are paid by the government, so we operate on a nonprofit basis.

Interviewer: How do you maintain your records?

Ans (Chef, SEECS Mazdoor Cafe): We maintain our records in registers.

Interviewer: Do you forward these records to someone?

Ans (Chef, SEECS Mazdoor Cafe): Yes, we forward the daily record of sales and other details to our supervisor every day.

Interviewer: Does someone check the quality of the food?

Ans (Chef, SEECS Mazdoor Cafe): Often, the SEECS Principal comes to check the food quality.

Interviewer: What do you do in case of gas-related issues?

Ans (Chef, SEECS Mazdoor Cafe): We have secondary gas cylinders filled up for emergency situations.

Interview 9 (DD Female Hostel, audio 8)

Gulwarina: Okay, so let's start with introducing yourself.

DD Female Hostels: Assalamualaikum, my name is Muneeba Fatima, and I am working as the Additional Deputy Director of Female Hostels and Affairs.

Gulwarina: Okay, ma'am, I will now randomly go through the questions. How does the hostel budget affect the meals provided, both in terms of quantity and quality?

DD Female Hostels: Actually, this does not fall under my domain. AD Messing, Major Hamid, will be able to answer this.

Gulwarina: Okay. How does the management ensure that meal pricing remains affordable for students while covering costs?

DD Female Hostels: We don't provide that information.

Gulwarina: Okay, so nothing about the budget?

DD Female Hostels: No, I am not answering this question.

Gulwarina: Alright. What steps have been taken to address the problem of food waste while increasing operational efficiency? Are there any planned upgrades or expansions for mess facilities?

DD Female Hostels: Not in the near future due to budget constraints.

Gulwarina: Okay. What are the current issues you encounter in overseeing and managing the mess system?

DD Female Hostels: If you're asking about the budget, everything is tied to it.

Gulwarina: No, I mean, you can answer generally.

DD Female Hostels: Since I don't handle the budget, I can't comment on that. However, the issues we face from the students' side include not following the proper dress code in the mess and not adhering to the designated mess timings. Additionally, food waste is a major issue. Students take more food than they actually eat, which leads to a lot of wastage.

Could you repeat the question?

Gulwarina: Yes. What are the current issues you face in overseeing and managing the mess system?

DD Female Hostels: Yes, as I said, students not following the dress code properly.

Gulwarina: And those are issues from the students' side. What about from the management side? For example, is there a staff shortage or other operational challenges?

DD Female Hostels: We do not handle faculty matters. I only oversee the hostel mess. Students are charged in advance, so we are not involved in budget concerns or price escalations.

Gulwarina: No, I meant something else. In one of the previous interviews, someone mentioned a staff shortage affecting operations. I was referring to issues like that, which are on NUST's part, not the students'.

DD Female Hostels: Son, there is no staff shortage in the mess.

Gulwarina: Okay.

DD Female Hostels: Even if there are fewer waiters, everyone works as a team.

Gulwarina: Okay.

DD Female Hostels: So sometimes, they can be overworked because there are cases where two messes operate from one cookhouse. That responsibility falls on the manager. Yes. Anyway, people work in rotation. Okay. So there is nothing like that. Again, the budget and employment of the mess fall under AD Messing's domain.

Gulwarina: Yes. Right?

DD Female Hostels: So it is already under messing. Okay.

Gulwarina: Can you just generally tell me anything about your domain then?

DD Female Hostels: Yes. I am looking after the operations of the hostel. Okay. The cleanliness regarding things. Okay. The decorum of the hostel and the messes. Okay. And anything related to the female.

Gulwarina: Can you tell me more about the female hostel messes? Because we are more concerned with the mess system for the hostelites. Like how do you guys generally operate things? What are the things that you are overseeing?

DD Female Hostels: Actually, how we are operating things. Number one, if we start from scratch, we are planning the menus.

Speaker 3: Okay.

DD Female Hostels: Number two, we are doing the decentralized meeting with all the hostel students. Then after compiling the results of the decentralized meetings, we will compile that and present it in the central mess committee.

Gulwarina: Okay.

DD Female Hostels: There is voting. There are teams of boys and girls. Yes. There are teams of boys and girls. Yes. And then through voting, we finalize the entire compilation.

Gulwarina: Okay. The meal plan.

DD Female Hostels: The meal plan.

Gulwarina: Yes.

DD Female Hostels: For the Ramadan and the rest of the months. Every year in the month of about… Can you please pause? Yes, yes. It's a manual system. Yes. Okay. There are different stages of it. From the student end, we are charging from the student in advance. Okay. Okay. We take the advance per month from them. And then after that, the student who doesn't have to come, let's say you are going on a holiday or someone else is going on a holiday, there is a mess-off register.

Speaker 3: Yes.

DD Female Hostels: On which if he has to go on Friday, he messes us off on Wednesday, two days prior to that.

Speaker 3: Okay. Okay.

DD Female Hostels: So that according to that, we are doing so much budgetary because we don't have demand. In demand, I will explain it to you separately.

Speaker 3: Yes.

DD Female Hostels: On the basis of that, we generate the bill for the next month. Okay. This is the mess off. Yes. Okay. In that, the policy says that you cannot off more than 12 days.

Speaker 3: Okay.

DD Female Hostels: If you are not even in the whole month, but you have to pay the bill of 18 days out of 30 days. We will off you for only 12 days. Okay. This is what we charge the students. Yes. As far as planning is concerned, according to the menu that is planned, we get ration in two parts. Okay. One is dry ration and one is wet ration. In dry ration, all the pulses, flour, lentils, spices, all these are there.

Gulwarina: Okay. Things that don't spoil.

DD Female Hostels: Yes. It cannot be spoiled. Like ghee or oil. Yes. Things that have more shelf life. And what comes in wet? Vegetables, meat, eggs, bread, things like that. Okay. Now, both of these things are planned by A.D. Messing. Okay. According to the quantity. Okay. And then they order it and then make it. And then they have their own demand list and everything. So I… They look at the supply chain. They look at the PLP direct rate.

Gulwarina: Okay.

DD Female Hostels: We give the demand and they provide.

Gulwarina: Okay. And how do you monitor their expiry and all these things?

DD Female Hostels: We monitor their ration.

Gulwarina: Okay. So there is no chance of things expiring and then…

DD Female Hostels: No. There is no dry ration. Yes. Because it doesn't get over. Yes. But there is more utilization. True. And the fresh ration comes with it.

Gulwarina: Okay. Yes.

DD Female Hostels: We don't dump that much.

Gulwarina: Hmm. This is it. Okay. That makes sense.

DD Female Hostels: But there is no automated system.

Gulwarina: If there were to be an automated system, what are some features you would want in it? Like some things that would make your life easier.

DD Female Hostels: We will tell you that only. Because I don't deal with it at the backend.

Speaker 3: Yes.

DD Female Hostels: If you make a system, then you will have to do it in two parts. Okay. You will have to do it at the student end and at the management end.

Speaker 3: Yes.

DD Female Hostels: At the management end, you will have to make a complete model of the supply chain.

Speaker 3: Hmm.

DD Female Hostels: Like how the supply will be generated, how the SKUs will be done in it. Like SAP. You know SAP? Like in FMCGs, in SAP, it is a world-famous, top-of-the-notch supply chain management system. Okay. Entries are put in it, the demand is generated, then it goes to the next department. Then they do it. Then after that. Yes. That is a very big, complex thing. Okay. Here, it is different, different, different. And there is a lot of diversity in this thing.

Speaker 3: Hmm.

DD Female Hostels: Okay? So I will tell you that again. Because I am at the user end, I am at the operational end, I am at the discipline end.

Gulwarina: Okay.

DD Female Hostels: I am not at the purchases end.

Gulwarina: Okay.

DD Female Hostels: I will not be at the planning end.

Gulwarina: Yes, that makes sense.

DD Female Hostels: This is it. I am at the testing end. Hmm.

Gulwarina: That's it. So are there any like changes other than the students' one that you are hoping for?

DD Female Hostels: Look at the change, there are always chances of it happening.

Gulwarina: No, like any specific changes that you are hoping for?

DD Female Hostels: For what?

Gulwarina: Just like that. Just anything in general. For the context of the interview.

DD Female Hostels: Because you are on a very basic level.

Gulwarina: Yes.

DD Female Hostels: You are doing something on a very basic level. Yes. And in that thing, only the supply chain management system can run it in a good way. Why? Budgets. Like us. But everything is very, look, there is a lot of diversity in it.

Speaker 3: Hmm.

DD Female Hostels: There are different vendors of dry ration. There are different vendors of others. People of the proper PLP are sitting there.

Gulwarina: You mean like there are a lot of management parts of it.

DD Female Hostels: It is happening in different parts. The supply goes from here, then the ration comes from there. Then our people get it offloaded. Then they bring it here. Yes. This is a very complex system. Yes. Okay? And the PLP people generate it there and give it in different tenders. And those tenders people then deliver it. Some direct items reach the hostels. Some reach the ration stores.

Gulwarina: Okay.

DD Female Hostels: Then according to that, there is a lot of receiving. CRS system is running in our PLP.

Gulwarina: What's that?

DD Female Hostels: Central Ration Store System.

Gulwarina: Okay. And it manages these things?

DD Female Hostels: It manages demand and supply.

Gulwarina: Okay. Is there anything else you would like to add? That's it.

DD Female Hostels: That's it.

Gulwarina: Thank you so much. Thank you so much for your time.

Interview 10 (Mess Supervisor female hostel, audio 3)

Interviewer: This is a class assignment, so we decided to interview altogether instead of individually interviewing.

Mess Supervisor: Okay, that's good. There's a single management for the mess and hostel here. The difference is that the hostel management is in direct contact with the students. We're also in direct contact, but the contact is limited to food only. Students come to us for food-related concerns, but the accommodation and rest of the processes are managed by the hostel manager. We're just concerned when it comes to the food and the dining hall. If some workers go on leave, we use the hostel staff with permission, of course. Our management is different.

It depends on the strength of the students. For example, we have 450 girls in this hostel. So based on that, the staff is authorized. One cook and one waiter are authorized per 50 students. According to that, including me as the supervisor, we have 25 staff members here. We have one less staff member, so there are 24 in total. Ten of them are authorized, along with the head cook. We have nine waiters, two dishwashers, and some sanitary workers as well. There are two authorized per mess. Khadija Mess is the smallest one, so there's only one sanitary worker. The rest of the messes are larger. The total authorized strength of the staff is 25, but currently, we have 24.

According to the SOP or NUST's rules, we do everything based on the orders we're given. Students' queries or complaints are handled through the complaint register, on a piece of paper, via mail, or in meetings. If it's a valid point, then there's an amendment. According to this, the breakfast timing in the mess schedule is 7:30-9:30 AM, but we keep a margin of 10-15 minutes in case some students get late. I'm talking about working days, not holidays. The lunch timings are from 12:45-3:30 PM, and dinner is from 6:30-9:30 PM. On holidays, breakfast is from 9-10:30 AM, and lunch is from 2-3:30 PM.

We have to give food to the whole staff, so we manage it accordingly. This is the rule of our ration. Our fresh food comes on a daily basis—there is no compromise on this. If you don't eat

eggs and potatoes in the morning, fresh food will not reach us at 6 o'clock in the morning. The fresh food will come to us in the evening. We also store some food at home.

When we go to the vegetable market, we buy vegetables for the whole month. We buy tomatoes, onions, everything. But here, we don't follow that style. Our vegetables reach us in the morning and in the evening. There are onions, tomatoes, cauliflower, peas—everything we need. We don't store a lot of vegetables. If we buy 20 kilos of potatoes, we save 2 kilos. If we buy 2 kilos of onions, we save 2.5 kilos. If we buy 4 kilos, we save 5 kilos. It's not a bad thing—it's just a way to manage our resources.

Interviewer: How do you save the remaining vegetables?

Mess Supervisor: They are used the next day. It's not like that—management is understood after a long time. There is always a balance in everything. If a bag of wheat flour costs 20 kilos, it will cost 20 kilos a day. If I have 450 kilos of wheat flour, it will cost me 450 kilos a day. There is always an adjustment.

How many people are there in your house? Five, six, eight, ten? If you use one kilo of wheat flour a day, it won't always be exactly one kilo. The same system applies here. The ration we distribute today can be 10 kilos more or 20 kilos less. We can save food by managing it properly.

Interviewer: If you cook a lot of food and it's not enough, how do you manage it?

Mess Supervisor: You have to wait for 10-15 minutes. It's not a hotel; it's a mess. For example, we have very little food waste here. If we ever run short, we prepare more food in 10-15 minutes. We also cook in another mess if needed. If only 5-10 girls are affected, it's not a big issue. It happens occasionally, but we always manage it properly.

Interviewer: How do you clean the mess?

Mess Supervisor: First of all, that is not your concern. We clean after you leave.

Interviewer: I meant, how is the mess kitchen cleaned?

Mess Supervisor: The kitchen is cleaned on a daily basis. A sanitary worker is always present there.

Interviewer: Have you ever visited the kitchen? You should come to visit the mess and see how it is cleaned. All the vegetables are cut there. When the kitchen is in use, it gets dirty, so it is cleaned immediately. For example, when vegetables are cut, the sanitary worker cleans up the scraps, loads them into a wheelbarrow, and dumps them. Whether work is being done in the kitchen or not, it is cleaned every 30 minutes to an hour.

Interviewer: How long have you been here?

Interviewer: It's my second semester here.

Mess Supervisor: Have you ever seen a housefly in the dining hall?

Interviewer: No.

Mess Supervisor: Just like that, there are no houseflies in the kitchen. I have a question—if there are no houseflies in the dining hall or the kitchen, how can one appear on a plate?

Interviewer: So, sir, the authorities—

Mess Supervisor: No, please answer my question first. You're very young right now. Every now and then, students claim they find fresh houseflies in their food. Am I wrong? Ask this madam right here. I know you're recording. You know how they say, "children never lie."

Interviewer: Are most complaints always regarding this?

Mess Supervisor: I have spent 32 years in this service—not just this service, I served in the army first. I have great cooking experience. You university girls can judge good cooking. I also know how to cook, and I have an interest in it. I even look things up on Google. You give me 1000 flies, I will cook them in a kilo of eggs. If you find a wing of a fly, bring it to me. Is it possible? If along with the wing, you have to share it, when you go—all of you—if you get fresh flies on the plate, the flies are not actually in the food. It is just mischief.

We understand this, and we ignore it. Next question.

Interviewer: Do students who complain come directly to you?

Mess Supervisor: No. Complaints come to us, but the complaints that you see in the book—when they reach me, I pass them to the AD Messing. If the AD Messing finds it suitable, then it is sent to the DD. We also have an additional DD, Madam Muneeba. She reviews the complaints and either writes her remarks or informs us in writing.

If it is a major complaint, then we decide how to handle it. When you complain, you should know that we keep food for 24 hours. We know that if flies can appear fresh, then there could be other issues too. We keep the food for two days for testing. We heat the food from here and send it for analysis. If there is a problem, they let us know. If it turns out to be mischief, they inform us as well. Most of these mischiefs are a joint effort. I cannot tell you more.

Interviewer: Sir, what is the main complaint that comes to your mess?

Mess Supervisor: There aren't many complaints in my mess. There is a complaint register—you can check it.

I have asked you this before: if there are no flies in the middle of the dining hall, no flies in the kitchen, and we clean each grain of rice and lentils, then where do the flies come from?

Students sometimes attempt to pressure the staff, but the staff cannot be pressured. If an 18-year-old girl tries to pressurize a 60-year-old worker, then that is a difficult task.

Interviewer: What if there is a complaint about the taste of the food?

Mess Supervisor: That can happen. From Baltistan to Karachi and Kashmir—where are you from?

Interviewer: I am from Kashmir.

Mess Supervisor: Thank God! Where in Kashmir?

Interviewer: Bagh.

Mess Supervisor: Mashallah, very nice. Which semester are you in?

Interviewer: Second.

Mess Supervisor: That's good. I have not counted cities; I have counted Baltistan, Karachi, and Pakistan. Can everyone have the same taste preference?

Interviewer: No.

Mess Supervisor: People from Kashmir eat spicy food. People from Punjab have different tastes. We understand all the cultural preferences. In KPK, green chili is preferred, not red chili. People in Karachi have their own preferences. I have never been there, but I know about the food habits of different regions.

When we cook a meal for hundreds of students from different backgrounds in the same pot, some will like it, some will not. There are hostels outside too. Some students, when they clear their final exams, stay outside for three to four months for assignments. If you get a chance, ask them about their experience. You will understand everything. That is why I say—spend not just two weeks, but even two days eating outside, and you will realize the difference.

Only when you compare the mess, the SOPs, the protocol, and the accommodation with what is available outside will you truly understand the quality and effort put into this system.

Interviewer: I am not asking about that. I am saying, what if the mess system is removed and replaced with an online system?

Mess Supervisor: That would be a very difficult task.

Interviewer: So, do you think such a system would be beneficial?

Mess Supervisor: Science is progressing rapidly, but there is a difference in understanding. If you believe that this management can be done in a very efficient way, then that is your opinion. But let me tell you something—removing an existing system is not easy.

How far is the PMO? About 1.5 km. If you remove one thing from here and transfer it to the PMO, the cost will increase by at least Rs. 50. You may not fully understand what "online" means in this context and how the rest of the system would function. But it is good that you are thinking about improvements. However, consider whether the current system can truly be replaced with an online one.

Interviewer: Basically, our assignment is that the registers you coordinate with MS people, if everything is online, if there is a complaint, it will come to you directly.

Mess Supervisor: There is no complaint. There is a system. There is a check and balance everywhere. We don't buy it ourselves. I will show you. Our purchase is under PLP. This is a section in PMO, and this is the reason for local purchase. The direct contact is with finance. Do you understand?

Interviewer: Yes.

Mess Supervisor: Our store had a different system, and we had to go there because this is going on, and we have to talk about it. The contractors do this every month. They do it once and renew. They come every month and give their rates. I think you wanted to ask this, but I didn't understand your question.

Interviewer: Yes.

Mess Supervisor: So, when the contractors come, they give their rates—beef, chicken, fresh vegetables, flour, lentils, rice, sugar, store items, dry food items. There are four or five people. Then they understand that this person has a good rate. They say, "Give your sample." They come, they check, then they come to us because who uses them? We do. We have to pass them. If you see, there is an AD. He is very old. He speaks a little harshly. Is it like this?

Interviewer: Yes.

Mess Supervisor: There is a DD office. He comes to them. They check. They say, "This is good, this is good, this is good." This is Pakistan. The sample is passed. A lot happens. We get good quality. We get good quality. We eat. When we eat, we get good quality meat.

The problem with meat is that there is a lack of taste. That's why a lot of contractors, when they are in one place, when the meat is mixed, the taste is not the same as in one place. Cow, buffalo, ox—whatever. We are from villages. When there is something like this in the village, people buy meat. It is very expensive. Here in the cities, the bigger the market, the bigger the shop, there will be a mixture. There, you will not get meat. That's why there is a big problem with taste. The taste is not good.

So, the PLP people, when everything is cleared, they buy. Then we have a store—ration store. If you go down, there is a small mosque. Have you seen MT? It is on the left side. On the left side. So, all these things are there. The PLP people demand. They buy. They give money. Everything is in their system. The contractor takes it to the ration store.

The dry ration that you have, we receive it for 15 days from there. OK? We take it from there. And your fresh vegetables and other things—we have only the record, the price, nothing else. We have nothing. From here, we consume the ration. The balance—we make all the details. And on a monthly basis, we collect it. It is up to them. It is the account. It is the missing. They sit with them. How much is missing? How much is the money? Whatever it is, only the AD can tell. We don't have the record. The record we have, we will tell you.

Interviewer: The mess is changing. I think the dishes are changing. I don't know. How is it? The mess is changing, as you were saying—it happens.

Mess Supervisor: According to NUST SOP, the mess should have a meeting every three months.

Interviewer: Okay.

Mess Supervisor: Do you know why we do it? We do it for a reason. After three months, if the meeting can't be held there, we take a proposal and conduct the meeting here. The meeting includes members and a secretary, and they give us their points. They suggest changes, like, "Let's add this," or "Let's remove that." You must have noticed that the menu keeps changing—some dishes are removed, like if the cabbage isn't good, the spinach isn't good, or the lentils aren't good, we make adjustments.

The main meeting, like the one that just happened for Ramadan, was used to finalize both the Ramadan menu and the post-Ramadan menu. Both were decided.

Interviewer: How long will this menu last? Was it decided for a year?

Mess Supervisor: No, it was decided for 3-4 months.

Interviewer: But we have been living here for three months.

Mess Supervisor: I told you, if there wasn't a main meeting, then a smaller meeting happens in each hostel. Your representatives are present, and they decide on small changes—one or two dishes might be replaced.

Interviewer: What about that meeting?

Mess Supervisor: I've told you—there is an open meeting. We want it to happen regularly, and there is no issue with that. But sometimes, due to time constraints or other reasons, if a main meeting isn't held, the decisions are made here. The Ramadan menu was finalized this way. Yes, I believe another menu was also decided.

Interviewer: This one is for Ramadan? And you've said the post-Ramadan menu was also finalized?

Mess Supervisor: Yes, it was decided for 3-4 months.

Interviewer: Did it change again after that?

Mess Supervisor: In a year, there should be a meeting every quarter—so every 3-4 months, the menu is reviewed and decided. If there is no main meeting, then a smaller meeting is held in the hostel, and minor changes—one or two dishes—are made. After that, they decide on the next meeting.

Interviewer: Is that all?

Interviewer: Is everyone a part of that meeting?

Mess Supervisor: No, it's the hostel manager and AD. Our madam supervises and takes all the points. They take the manager and write the proposal for the suggested menu. After writing, they put up the letter, and the hostel sends it to its AD. Then they send it to AD Messing. All the suggestions from the hostels are sent to DD, and they recommend it to the director.

It's not that easy. Management is very difficult. They suggest it to the director, and all these things go to the director. From there, it is approved and sent back. It's not my job to change a menu. I can't even change a cup of tea. I am a worker. I am a supervisor, but I am a worker.

I don't have any objection to changing anything. If it has to be changed, it will be done by our boss. But he will give his recommendation. It will be done by the product director. Yes, we also recommend it. For example, girls ask us about this, and we say that girls like this more. We know that girls like this more. We recommend it to them.

We can give this recommendation, but we are not going to change it. The authority does it. You didn't ask the real thing. I will tell you. I know. This is our consumption. We have only one register. This is the official register. What is signed is official. It is an official document.

This is the consumption register. All your groceries are consumed here. This is written here. This is the ration received. It is written here. TFine Flour, Chakki Flour Mixed Flour is consumed Per Day. Vegetables are purchased daily. That ration is bought every 15 days. Daily Basis Entry of Price. We don't have the price details. Accounts have it. Our concern is not the price, our concern is the quality and how well it can be cooked and served.

Interviewer: Do you get a separate ration for every mess?

Mess Supervisor: Yes, every mess gets its own ration, but it comes to the same place.

Interviewer: The store is on the left side of the M.T. If you ever go there, ask them. It's a big and clean store. The P.L.P. People there have their own system. They handle the money, coordinate with the contractors, and make purchases.

The store operates with a structured hierarchy. There are two to three supervisors like us and laborers working there. The store staff receive the supplies.

Interviewer: Who is responsible for making the payments?

Mess Supervisor: Finance has to pay.

Interviewer: Through whom is the payment processed?

Mess Supervisor: It is paid through P.L.P.

Interviewer: Who is responsible for coordinating with the contractors?

Mess Supervisor: P.L.P. handles everything.

Interviewer: But who receives the groceries?

Mess Supervisor: The store staff. They have their own process. The grocery store personnel also coordinate directly with P.L.P. Once they purchase the groceries, our demand goes to them.

Everything follows a structured process. We don't place a full demand all at once. Instead, we submit normal daily demands.

Interviewer: Can you explain how this process works?

Mess Supervisor: A fresh demand is generated daily. Our supervisor compiles the main proforma for all 10 messes across 17 hostels.

Once the proforma is ready, it is sent to the account clerk. The clerk then uploads it to the I.O.N. system and forwards it to the store staff. From there, the vegetable supplier, meat supplier, or other vendors receive the demand. We don't directly place orders with anyone.

Similarly, for groceries, we create a simple form.

Interviewer: Is this form in Urdu?

Mess Supervisor: Yes.

Mess Supervisor: Once this form is prepared, it covers the needs of 10 hostels. You must have seen these forms; they mention "messes" rather than "hostels."

For example, how many hostels does Fatima have?

Interviewer: Two.

Mess Supervisor: And how many messes?

Interviewer: One.

Mess Supervisor: Exactly. So, there are 17 hostels and 10 messes in total.

Interviewer: Do faculty messes follow the same system?

Mess Supervisor: No, faculty messes have a separate system.

Mess Supervisor: When the form is sent, it records the grocery intake for March. We maintain this record, and the total grocery quantity is written on it.

Interviewer: Out of all your responsibilities, what is the most difficult task?

Mess Supervisor: Managing the students is the hardest part.

Even in the army, I was an instructor and had to manage cadets. Do you know what cadets are like?

Interviewer: Yes, they can be mischievous.

Mess Supervisor: Exactly. Managing them was difficult, and I did it for a long time.

One of the hardest things is answering students' questions. For example, sometimes a girl hesitates to ask something, but it's necessary to ask questions so we can address the problem.

Once, a student complained that the biryani was "very bad." I asked, "What do you mean by bad?" Was it too spicy? Was the rice undercooked or overcooked? Did it have too much tamarind? There was no detail in the complaint.

Interviewer: So what do you do when you receive such complaints?

Mess Supervisor: We review the complaint, log it, and take action if necessary.

Interviewer: But taste is subjective, right? Every student has different preferences.

Mess Supervisor: Yes, but if only one student out of 450 complains, it doesn't hold much weight.

Interviewer: True.

Mess Supervisor: But if 30, 40, or 50 students report the same issue—like undercooked rice or excessive spice—then we take it seriously.

Even if one student complains, we document it, write a remark, and try to prevent the issue from happening again. However, it's impossible to satisfy everyone's tastes completely.

Interviewer: Yes, every student comes from a different background with different food preferences.

Mess Supervisor: Exactly. If this were a restaurant, students could order customized meals, like less spicy karahi. But this is a mess, so the food is prepared in bulk.

Over time, students adapt. When first-year students arrive, they complain more, but as semesters pass, they adjust.

Interviewer: So complaints decrease over time?

Mess Supervisor: Yes, because students gradually get used to the food.

Mess Supervisor: Based on such mischief, I can share an example. I have many because I've been here for a long time.

I was in Zakaria Mess when a student filed a complaint—straight to the rector. Now, it's not normal to take complaints to the rector unless there's a serious issue.

So, I was called in, and they told me it was from the rector. I asked the student what the problem was.

Interviewer: Hmm.

Mess Supervisor: I went to find the student. When I finally met him, he was preparing to leave for Sahiwal.

I asked him, *"You filed a complaint with the rector instead of coming to me. We are here for the same reason—to resolve issues."*

If you tell me directly, I can take immediate action. But if you escalate it to the rector, the process takes 7–10 days. There's a formal letter, signatures, approvals—it all takes time.

So I asked again, *"What's the issue?"*

And do you know what he said? *"There is no issue."*

I was shocked. *"Then why did you send the email?"*

He admitted, *"My friend in Hajveri suggested that if there's ever a problem, we should email. So I did—even though I had no issue."*

I told him, *"You have created a problem for us. A complaint to the rector is serious. You're treating it like a joke."*

Some students don't have real complaints. Yes, food complaints can happen—maybe it's undercooked, too spicy, or insufficient.

Like one girl mentioned earlier, sometimes there isn't enough food, so we make students wait 10–15 minutes while we fetch more from another mess or cook extra. That's the system. Managing it is very tough.

Convincing every student in the hostel that things are fair is impossible.

Interviewer: So some students don't understand the SOPs?

Mess Supervisor: Exactly. They receive the SOPs, but many don't read them.

Then, when they interact with the staff, supervisors, or managers, they unknowingly violate the SOPs but still argue that it's their right—without understanding the rules.

Interviewer: Do you stay here until all the food is finished?

Mess Supervisor: Inshallah, yes. We are here from 5:30 in the morning until 11 at night.

We return at 9 or 10:30 at night, sometimes even later. Our routine starts at 5:30 AM and ends at 10 PM.

Interviewer: Do you have your own separate mess?

Mess Supervisor: No, our food and the staff's food come from this mess.

Interviewer: Do you eat before or after the students?

Mess Supervisor: After. We have to attend to students first—this is part of the job.

When you start working, you'll understand what a job really is. Right now, you're living on your parents' money. When you earn and eat from your own income, you'll truly understand.

Interviewer: Some universities operate more like a café—you go, pick up your food, and that's it. Do you think that model would work here?

Mess Supervisor: Dear, I mentioned this because when I talk about something, I speak from experience. If you spend two days outside—whether in a café or another hostel—you'll see the difference.

Some people might think I'm speaking randomly, but that's not the case. We've seen it all. We've been outside many times, visited different hostels, and observed how things operate.

Take the students who leave for months—those who go outside, have fun, and then struggle when they return. We see this often. They vacate their hostel spaces, thinking they'll manage, but when they come back, they regret it. They complain about how hard it was outside. I tell them, *"You're facing the same difficulties that some students used to complain about here."*

The environment here is actually very good.

Now, if you ask me about the pricing, let me tell you—every item, every piece of bread, has a separate price. Whether the quality is good or bad, I don't know, but I can say it's much better than what you'll find outside.

Here, food is made fresh in front of you. You see clean tables, proper preparation. Compare that to the market or hospital cafeterias—where flies are everywhere.

Our workers wear clean uniforms and hats while preparing food. Yes, sometimes, unfortunately, a small mistake happens—maybe a hair ends up in the food. If that happens, the students won't let it go.

The moment there's an issue, the plate is brought to the manager, complaints are made instantly. Sometimes, a whole group comes forward together.

But tell me—if just one hair is found, can't it be overlooked? Sometimes, mistakes happen.

If you come here, see our efforts. If you don't know, ask your manager how much effort goes into this.

We work 16 hours a day, but we're only paid for 8. We don't complain. We get extra food, and we thank Allah.

That's why I spoke to you this way—because gratitude is important.

Any more questions?

Interviewer: No, thank you.

12. SUMMARY OF SURVEY RESULT

From open ended question

| Category	Estimated Count	Percentage
No Issue	6	10%
Taste / Food Quality Issues	24	40%
Mess-Off Policy & Billing Issues	12	20%
Food Choice / Lack of Options	3	5%
Service / Timing / Overall Quality	9	15%
Unbalanced Menu	3	5%
Total	60	100%

From MCQS:

- **Taste-related issues**: 41.67%
- **Menu-related issues**: 28.33%
- **Hygiene and cleanliness issues**: 15%
- **Cost-related issues**: 10%
- **Timing and convenience issues**: 10%
- **Quality of food**: 10%
- **Other issues**: 6.67%

BELOW IS THE TRANSPARENT RESULT OF OUR SURVEY
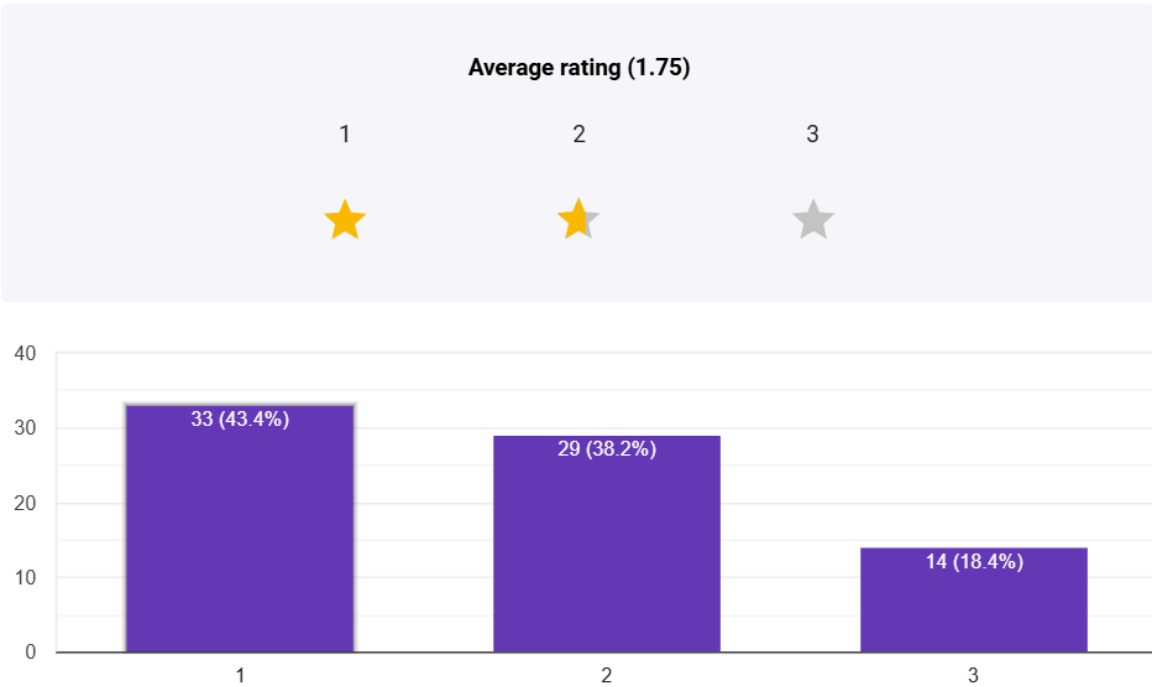
how do you currently pay for the mess bill

78 responses

- online
- physically at the bank

39.7%

60.3%
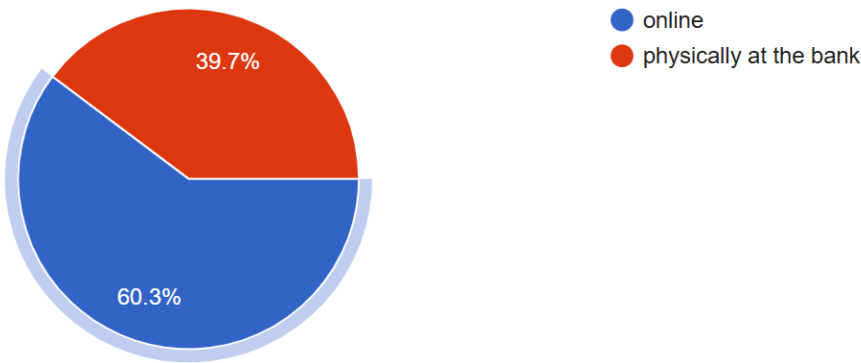
Copy chart

if you have complaints about the current system how easy is it to convey it to the management

76 responses

Average rating (1.75)

| 1 | 2 | 3 |
| ⭐ | ⭐ | ⭐ |

33 (43.4%)

29 (38.2%)

14 (18.4%)

have you ever been wrongly charged for a meal you didnt eat ?

77 responses

- yes
- no

55.8%

44.2%
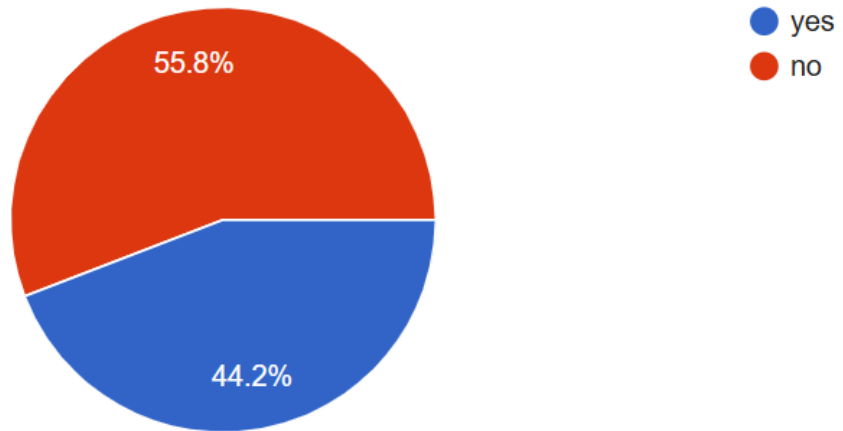
do you want a fixed meal plan or for the menu to change monthly ?

78 responses

- fixed
- monthly

83.3%

16.7%
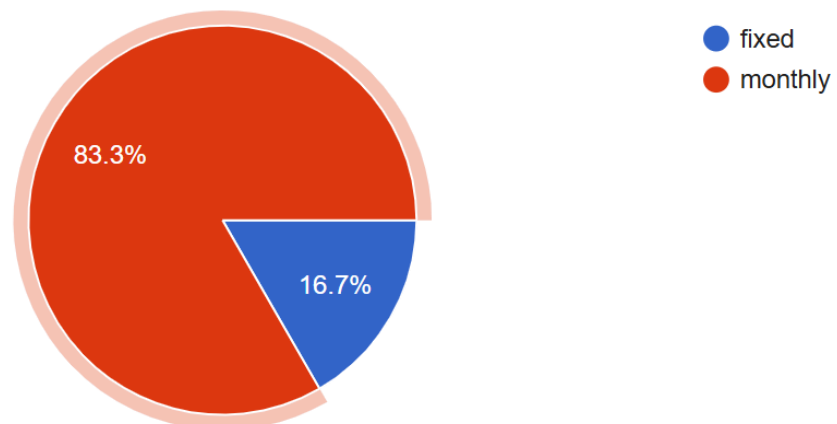
would you like be interested in a meal rating system to improve the quality of food ?

78 responses

- yes
- no

92.3%

7.7%
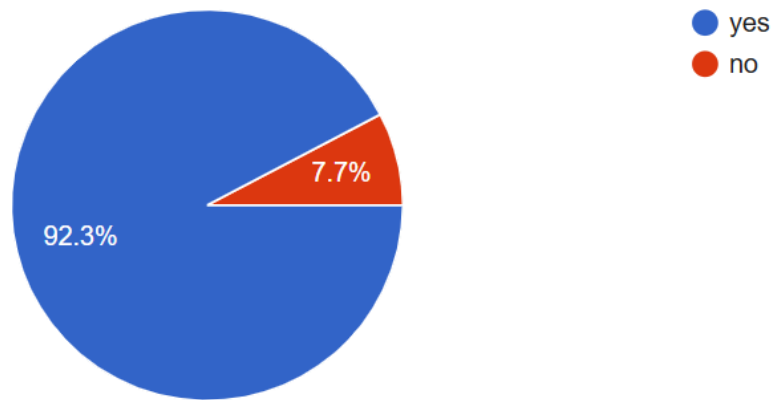
what is the biggest issue you have with the mess system ?

60 responses

Since this was an open ended question, students answered pretty randomly so we analysed the data and the result can be found here