
Software Requirements Specification

for

Unified Portal for Hall Automation

Version 1.0

Prepared by

Group #: 1

Group Name: The Tech Titans

Soham Amit Bharambe	210264	sohamb21@iitk.ac.in
Divyansh	210355	divyansh21@iitk.ac.in
Divyansh Chhabria	210356	divyanshc21@iitk.ac.in
Jhalak Sharma	210474	jhalak21@iitk.ac.in
Kriti	210534	kriti21@iitk.ac.in
Kumar Harsh Mohan	210543	harshmohan21@iitk.ac.in
Labajyoti Das	210552	labajyoti21@iitk.ac.in
Pranjal Singh	210744	psingh21@iitk.ac.in
Rajeev Kumar	210815	rajeevks21@iitk.ac.in
Sandeep Nitharwal	210921	nsandeep21@iitk.ac.in

Course: CS253

Mentor TA: Mr. Ashitosh Vankatrao More

Date: 27th January, 2023

Contents

CONTENTS	II
REVISIONS	III
1 INTRODUCTION	1
1.1 PRODUCT SCOPE	1
1.2 INTENDED AUDIENCE AND DOCUMENT OVERVIEW	1
1.3 DEFINITIONS, ACRONYMS AND ABBREVIATIONS	2
1.4 DOCUMENT CONVENTIONS	2
1.5 REFERENCES AND ACKNOWLEDGMENTS	3
2 OVERALL DESCRIPTION	4
2.1 PRODUCT OVERVIEW	4
2.2 PRODUCT FUNCTIONALITY	7
2.3 DESIGN AND IMPLEMENTATION CONSTRAINTS	7
2.4 ASSUMPTIONS AND DEPENDENCIES	7
3 SPECIFIC REQUIREMENTS	8
3.1 EXTERNAL INTERFACE REQUIREMENTS	8
3.2 FUNCTIONAL REQUIREMENTS	19
3.3 USE CASE MODEL	23
4 OTHER NON-FUNCTIONAL REQUIREMENTS	32
4.1 PERFORMANCE REQUIREMENTS	32
4.2 SAFETY AND SECURITY REQUIREMENTS	32
4.3 SOFTWARE QUALITY ATTRIBUTES	32
APPENDIX A – DATA DICTIONARY	34
APPENDIX B - GROUP LOG	45

Revisions

Version	Primary Author(s)	Description of Version	Date Completed
1.0	Soham Amit Bharambe Divyansh Divyansh Chhabria Jhalak Sharma Kriti Kumar Harsh Mohan Labajyoti Das Pranjal Singh Rajeev Kumar Sandeep Nitharwal	First draft	27/01/23

1 Introduction

1.1 Product Scope

Description-

Unified Portal for Hall Automation is a merged platform designed for the residents of various halls to access day to day hall functionalities. The project aims to digitalize various services provided by the hall that includes mess, canteen and various other services.

This platform would be a common unified platform for the residents as well as the managers to maintain a clean record of all the information regarding the hall.

Objectives and Benefits-

- It would help in maintaining a clear record of all the transactions and bills hence making the system more transparent.
- The rating system for canteen would help the students to have a better idea of a particular canteen.
- Order at the canteen will ensure that the students do not need to wait inside the canteen.
- It would reduce the paperwork and would provide an easier way to manage the data of all the residents.
- The complaints section would make it easier for the residents to make a direct complaint regarding all the services and for the hall office to review those complaints.
- It would display the mess menu of a particular day and the total calorie amount associated with each item.
- The software solves the problem of long queues by introducing online registration of extra food items provided in the mess instead of the earlier system of coupon registration.
- It would maintain the record of the sports equipment issued to the residents hence reducing the chaos.
- It would allow them to book the hall's guest room, gym and sports courts online and also facilitate the scheduling of cleaning service.

1.2 Intended Audience and Document Overview

This document is mainly intended for developers, hall residents, mess manager, canteen owner, hall management staff, testers and documentation writers.

The rest of the SRS is organized in the following manner:

● Section 2

This section provides a general description of the system and functions of the project, their constraints, assumptions and dependencies.

● Section 3

This section basically describes how users will interact with the system. It contains the hardware, software and functional requirements.

- **Section 4**

This section contains the non-functional requirements and additional system requirements.

The sequence of reading the document:

- Developers, Documentation writers and end-users (mess manager, canteen owner, hall residents and hall management staff)

They need to read the whole document. To get a better idea, after reading section 2.2, they should read section 3.

- **Testers**

For a better understanding of working of the system, they should mainly read section 3.3.

1.3 Definitions, Acronyms and Abbreviations

Article	Sports equipment available on request in a hall.
BDMR	Basic Daily Messing Rate per-person per-day mess cost.
Canteen	The canteens that are present in all halls, but not the ones in other areas in the campus. Each hall has only one. Not to be confused with messes/extras.
DB	Database
Extras	Dishes available in addition to the regular mess menu on payment.
Guest Room(s)	Rooms available in some of the halls for visitors. Not to be confused with the Visitor's Hostel, which is independent of the halls and is not covered by the system.
Hall	Hall of residence - hostels with a mess, canteen and other facilities.
Hall Manager	Employee at the office in each hall. Not to be confused with wardens, who only supervise matters.
OTP	One time password for identity verification.
Secy	Secretary, usually a student in charge of a facility.
UI	User Interface.
Worker	Housekeeping staff (separate sets for each hall) or mess staff.

1.4 Document Conventions

- General text - Font - Arial, Size - 11
- Subheadings -Font - Arial, Size - 14
- Headings - Font - Arial, Size - 18, white text inside grey rectangles.
- Webpage titles in section 3.1 - Font - Arial, Size - 12, underlined

1.5 References and Acknowledgments

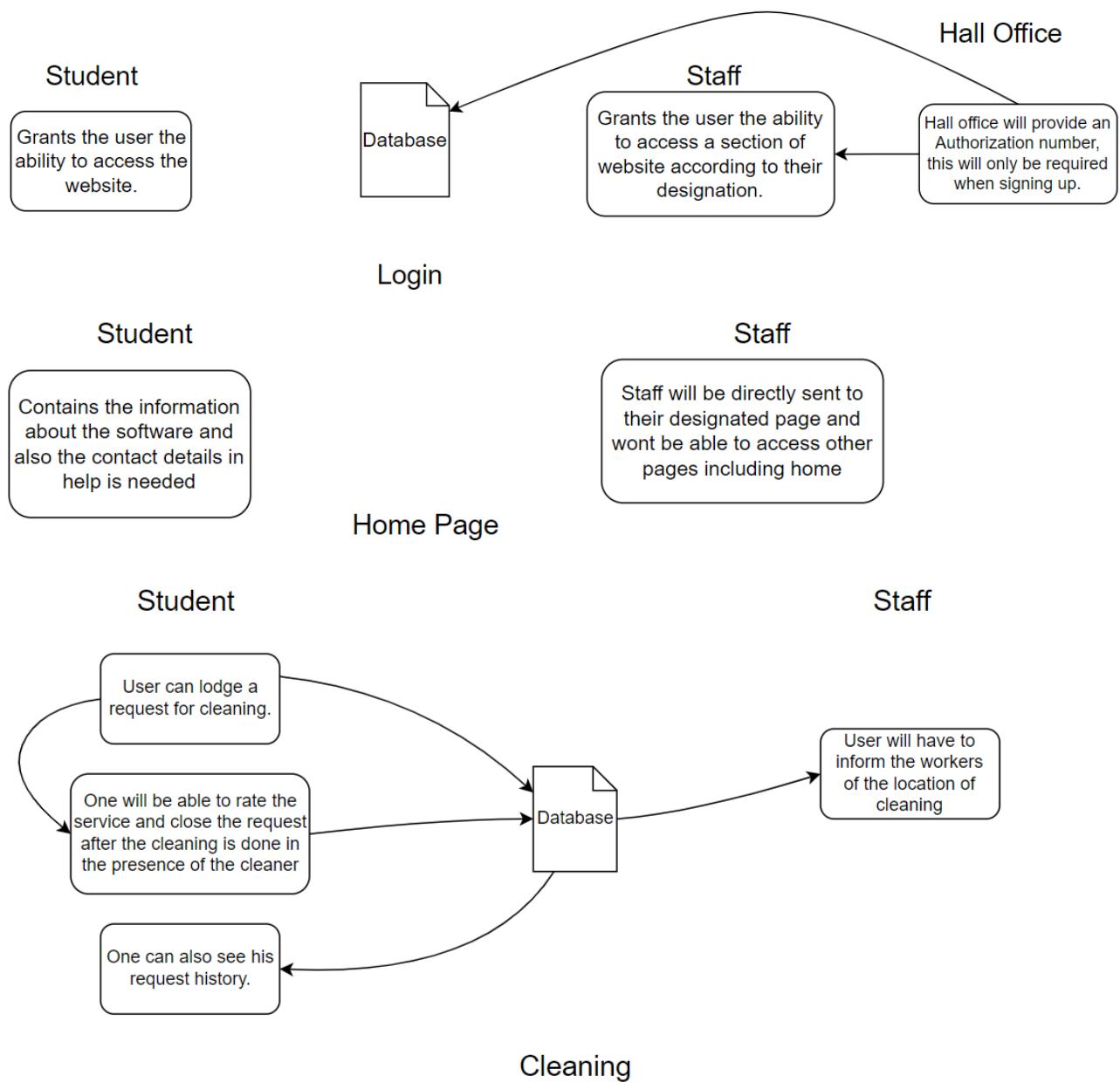
- <https://atlan.com/what-is-a-data-dictionary/>
- <https://diagrams.freebusinessapps.net/diagrams>
- <https://fontawesome.com>
- <https://www.flaticon.com>
- [Figma](#)

We'd also like to acknowledge the help of our TA, Mr. Ashitosh Venkatrao More, for their valuable input in the creation of this document. We also would like to thank Prof. Indranil Saha for providing the SRS template and teaching the concepts.

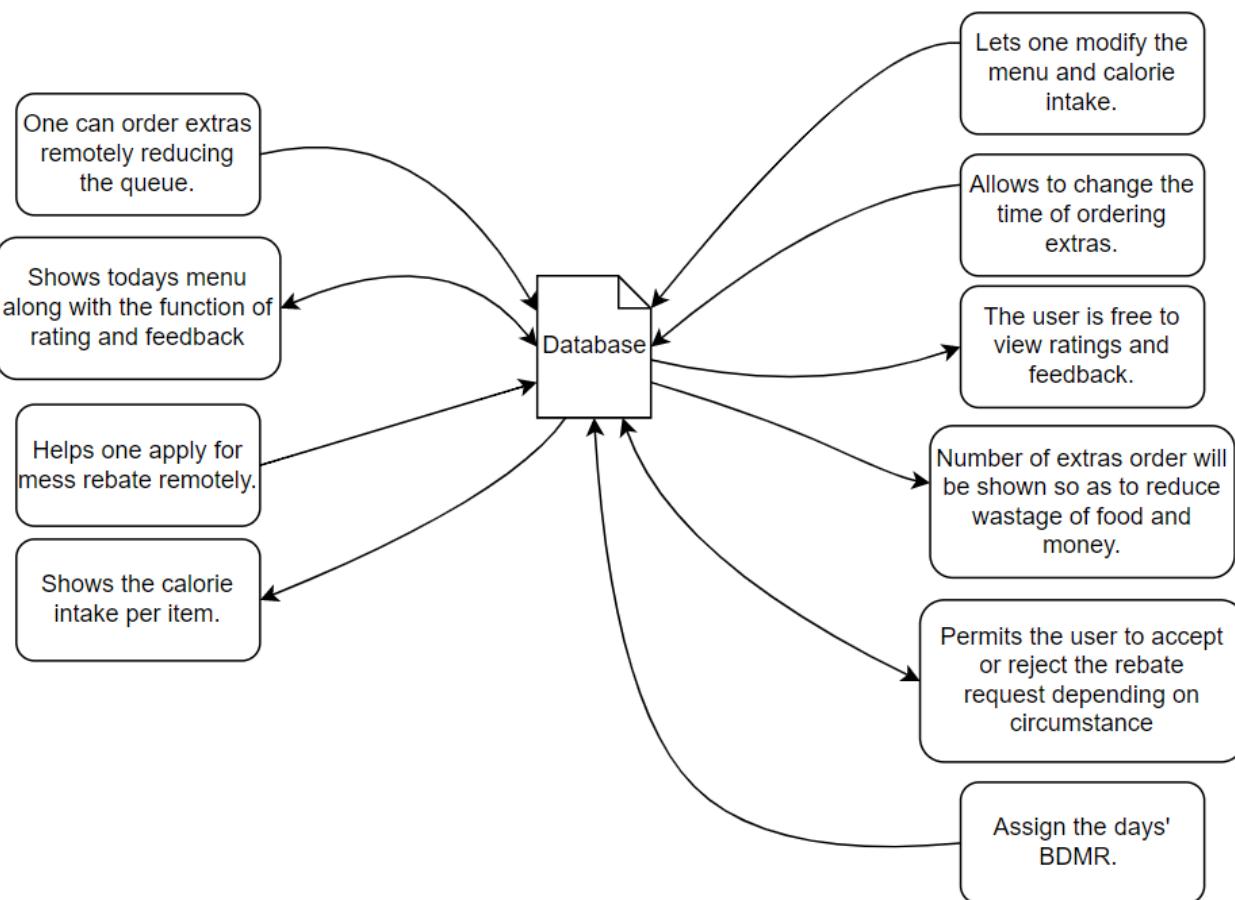
2 Overall Description

2.1 Product Overview

Our project is a follow-on member of an existing product whose aim is to reduce the efforts required to do some tasks, making them user-friendly. This software will be dedicated to Canteen, Mess, and issuing of other services provided by the hall and will be the link between the student and the managers of the respective facilities. Basically, the goal of Unified Portal for Hall Automation would be to digitize the paper procedures making them faster, easier and more transparent.



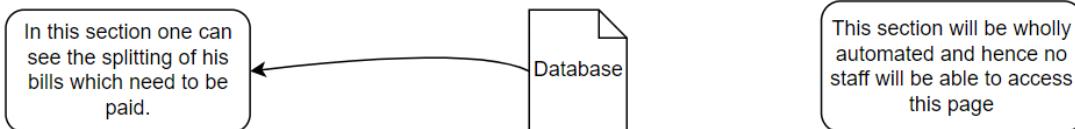
Student



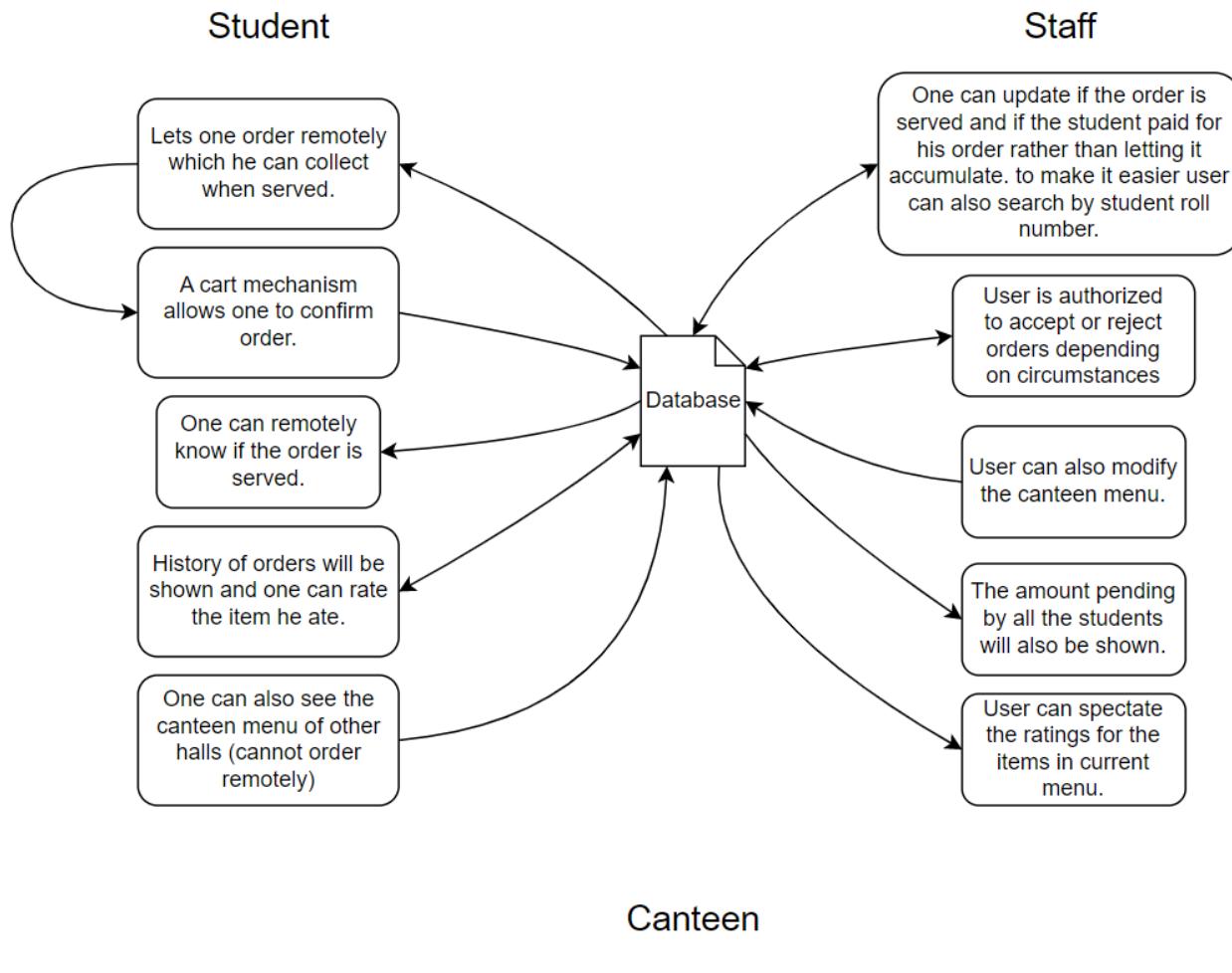
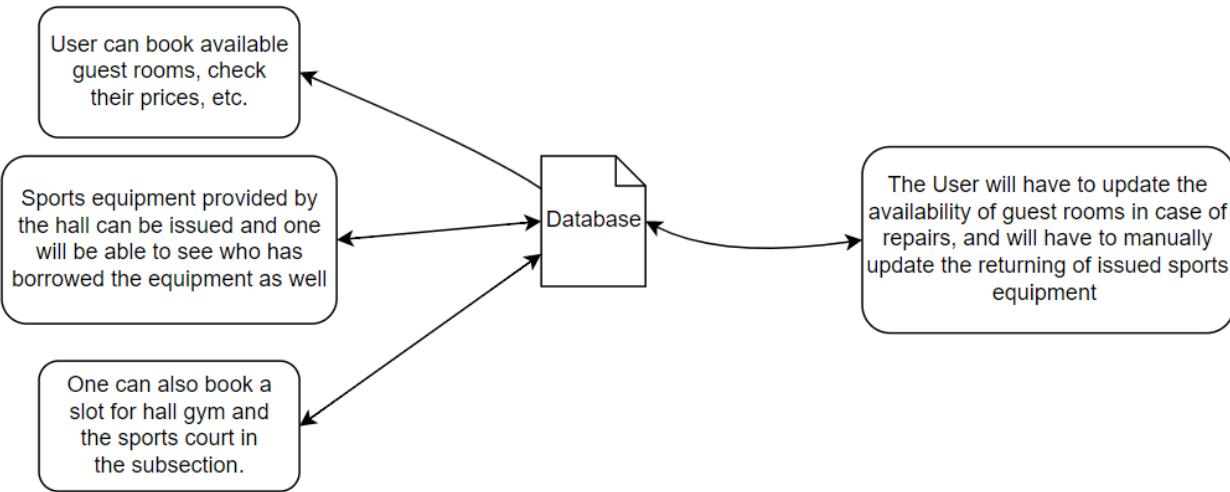
Mess

Student

Staff



My Account

**Student****Staff****Booking**

2.2 Product Functionality

- **User Profile**

Every user will have a unique user ID depending upon his/her role in the hall and would have access according to their designation, that is students, mess owner, canteen owner, hall manager etc.

- **Student's Account**

Each student will have his/her own student account which they can use for their expenditures in the hall. It will also have sections for monthly mess, canteen and electricity bill.

- **Mess Automation**

The Hall residents will have the convenience of booking the extras so that they don't miss their favourite extras, details of calorie intake of the items served and will also have a rating and review system for the mess.

- **Canteen Automation**

Users can order canteen items online using their Student's Account and avoid waiting. They can also see the rating of items and also rate them after ordering.

- **Other Hall Services**

Guest room booking could be done online. Contact details of cleaners of each wing will be provided. Any complaints regarding cleanliness can be lodged in the portal and once it's resolved it would be removed. Sports equipment, sports court and gym can be booked online.

2.3 Design and Implementation Constraints

- We have a specified memory in our system so the number of users in our servers is limited to an upper bound.
- Widgets like sliding switches for toggling on/off features are being avoided as not all users may be familiar with them.
- Users will need a browser like Chrome and Microsoft Edge to use our system.

2.4 Assumptions and Dependencies

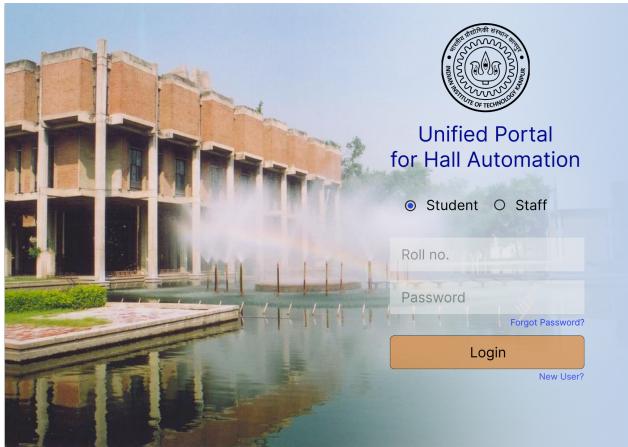
- All users are digitally literate and can navigate a website.
- Our system uses the IIT Kanpur mailing system for certain tasks and OTP requirements.
- Hosting the system locally, on intranet can protect it from denial of service attacks from outside. It is assumed that malware on devices of residents or miscreants will not flood the system with dummy requests.

3 Specific Requirements

3.1 External Interface Requirements

3.1.1 User Interfaces

1. Login portal:



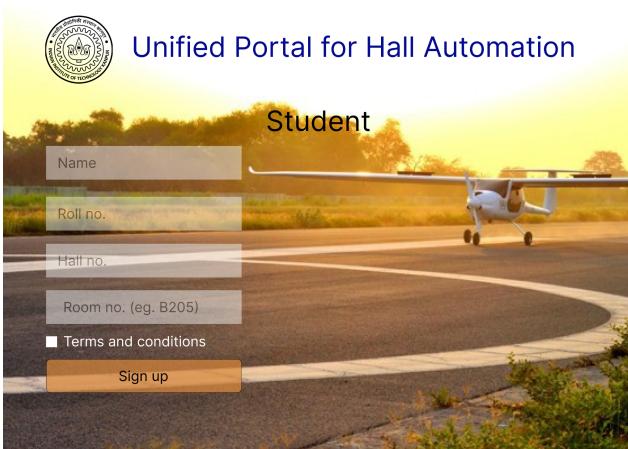
The login page for students features a background image of a modern building complex with a water feature. At the top right is the university's circular logo. Below it, the text "Unified Portal for Hall Automation" is displayed. A radio button for "Student" is selected, while "Staff" is unselected. Below the radio buttons are input fields for "Roll no." and "Password". To the right of the password field is a "Forgot Password?" link. At the bottom are "Login" and "New User?" buttons.



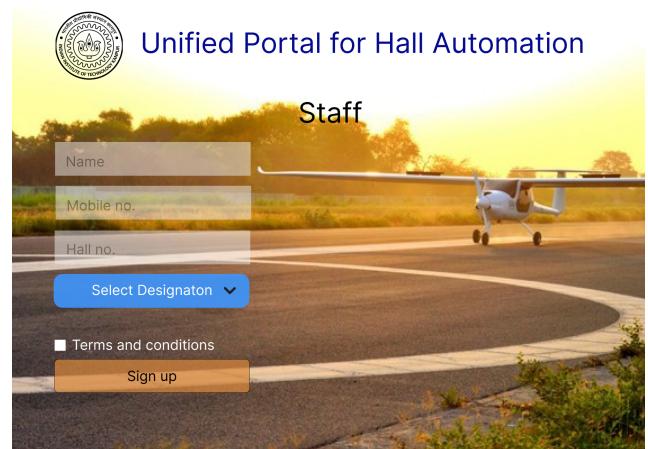
The login page for staff features a similar background image and layout to the student version. The "Staff" radio button is selected, while "Student" is unselected. The input fields for "Mobile no." and "Password" are present, along with a "Forgot Password?" link. At the bottom are "Login" and "New User?" buttons.

For accessing the home page and the services provided by this website, one needs to sign in to their respective account in this page. The user will also have to specify if he/she is a student or the staff.

2. Sign up page:

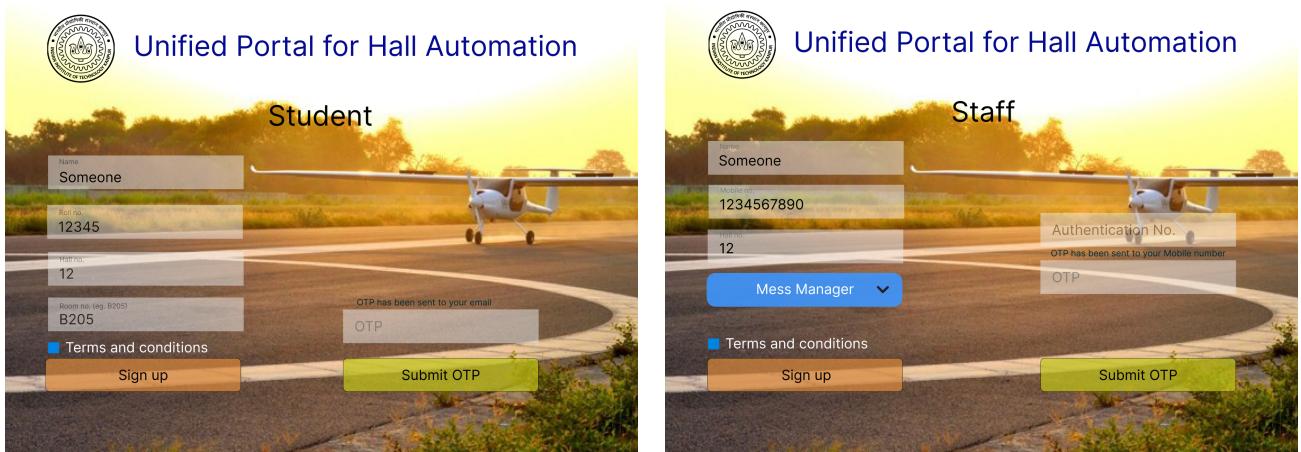


The sign up page for students has a background image of an airplane on a runway at sunset. At the top right is the university's circular logo. The text "Unified Portal for Hall Automation" is centered above the "Student" label. Below it are four input fields: "Name", "Roll no.", "Hall no.", and "Room no. (eg. B205)". Underneath these fields is a checkbox for "Terms and conditions" and a "Sign up" button.



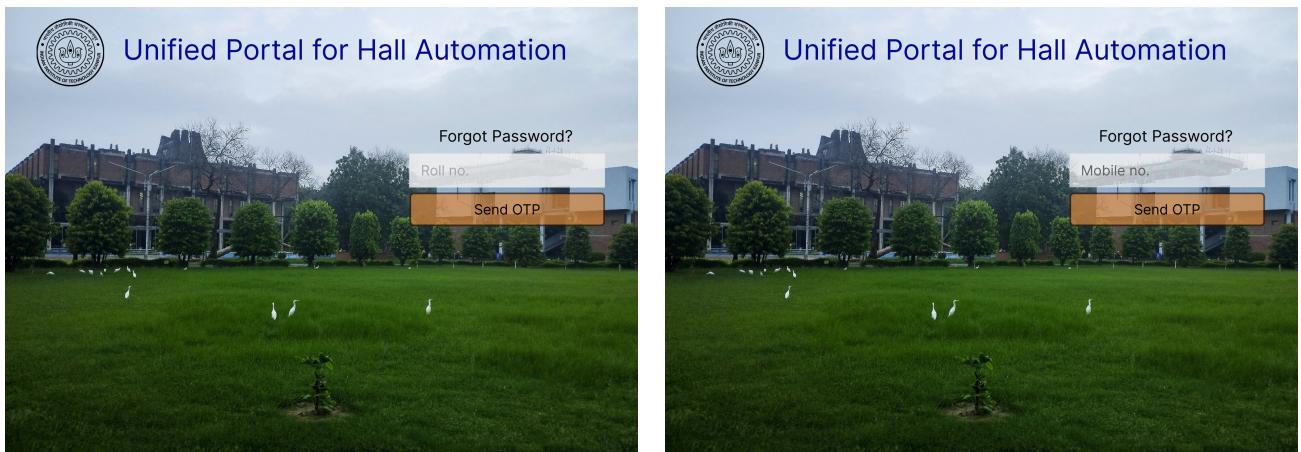
The sign up page for staff has a similar background image and layout to the student version. It features the university's circular logo at the top right, followed by the text "Unified Portal for Hall Automation" and the "Staff" label. Below these are four input fields: "Name", "Mobile no.", "Hall no.", and a dropdown menu labeled "Select Designation". Underneath these fields is a checkbox for "Terms and conditions" and a "Sign up" button.

Don't have an account? Make one on this Sign up page!! This page is accessed by clicking on the “New User?” Url located right below the Login button on the login portal. The unregistered user will also have to select if he/she is a student or the staff on the log in portal before accessing this page for them to access the correct page.

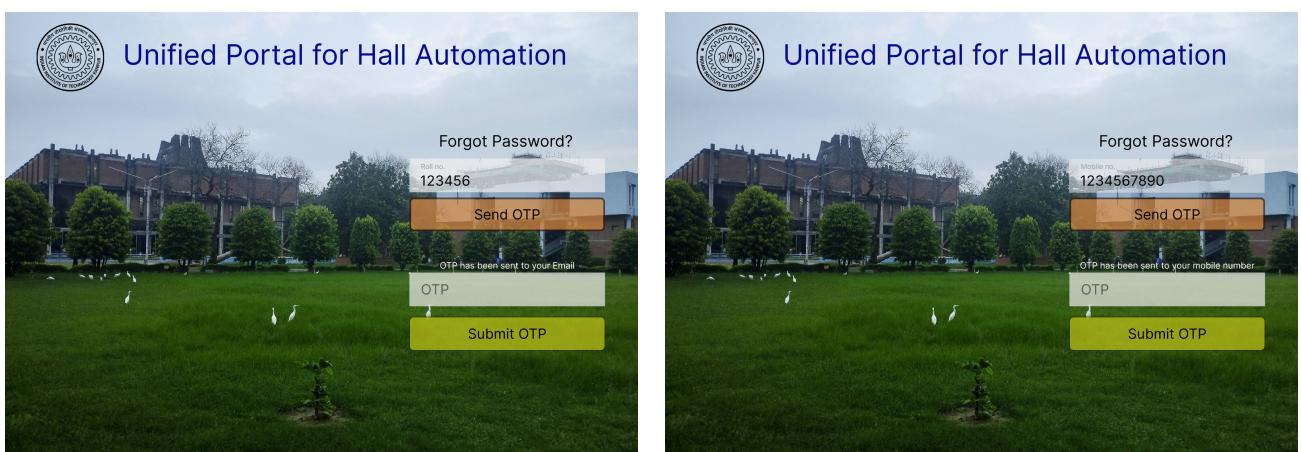


After filling the information when one clicks on “Sign up” he/she will get an OTP which the user will have to submit. Staff will also have to get an Authorization number from the Hall Office to make sure no ill-intentioned person will get access to website elements.

3. Forgot Password

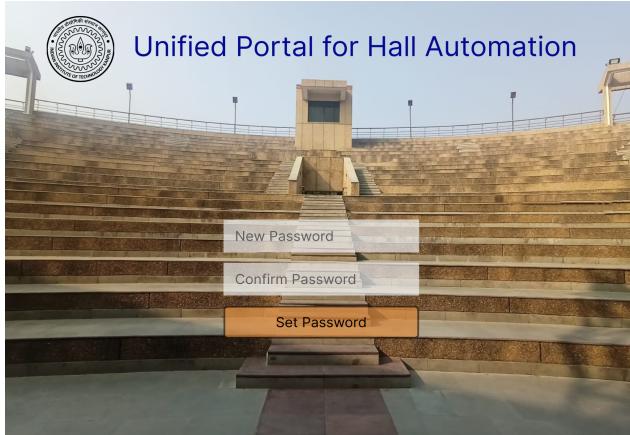


In case one does not remember his/her password correctly or there has been a compromise in secrecy, the user can reset his/her password through this page which can be accessed by the URL above “Login” in the login portal.



According to the identity one will get the OTP on Email or Mobile number which the user will then submit allowing him/her the access of this portal.

Entering the new password and then again entering the same string in confirm password one can set the password. The user will then be directed to the Login portal if the password was updated successfully.



4. Homepage:

This home page will contain the application name and logo on the top left and User details on the top right. Below the User details, you will find the Log-Out button using which user can log-out from this portal. Beside the Log-Out button, you will find all the available services on this portal. The users can navigate to the required service by clicking on the corresponding service. In the bottom section of the portal, you are given the contact details of the Hall Office and our technical team.

The Home page for Users other than students might have some functionality blocked represented by the grey colour of that section.

5. Canteen Student - Place Order

This page will contain options for a student to place an order in the canteen. It shows the menu of the canteen with the corresponding prices and their rating. Students can select the quantity of each item and add that to the cart.

Item No.	Item	Rate (in Rs.)	Rating	Quantity	Add Item to Cart
1	Chowmein	32	★★★★★	1	<input type="button" value="Add Item to Cart"/>
2	Macroni	35	★★★★★	1	<input type="button" value="Add Item to Cart"/>
3	Normal Maggi	27	★★★★★	1	<input type="button" value="Add Item to Cart"/>

Item No.	Item	Rate (in Rs.)	Rating	Quantity	Amount (in Rs.)
1	Chowmein	32	★★★★★	1	32
2	Macroni	35	★★★★★	1	35
3	Normal Maggi	27	★★★★★	1	27

Total Amount (in Rs.): 94

6. Canteen Student - Cart

This page shows the preview of the order to the students. Students can change the quantity of each item in the cart. Students can then confirm the order which will fetch them the order number for each item.

7. Canteen Student - Pending Order

This page will show the students the order number of each item. It shall also contain the status (ready to be served or not) of their order.

The left screenshot shows the 'Pending Order' section with three items:

Order No.	Item	Rate (in Rs.)	Rating	Quantity	Amount (in Rs.)
69	Chowmein	32	★★★★★	1	32
70	Macroni	35	★★★★★	1	35
71	Normal Maggi	27	★★★★★	1	27

The right screenshot shows the 'Order History' section with three items:

Date	Order No.	Item	Rating	Quantity	Amount (in Rs.)
30/02/2023	69	Chowmein	32	1	32
30/02/2023	70	Macroni	35	1	35
30/02/2023	71	Normal Maggi	27	1	27

8. Canteen Student - Order History

This page will show the students their order history in the canteen. Orders will be displayed in a date-wise manner. It shall also allow the students to rate the items they had ordered in the past.

9. Canteen Student - Other Hall Canteen

This page will show the other hall's canteen menu with rating to the students. He/She can only view the rating and is not allowed to rate the items. He/She also cannot place orders in other hall canteens through the portal.

The left screenshot shows the 'Other Hall Canteen' section with three items:

Item No.	Item	Rate (in Rs.)	Rating
1	Chowmein	32	★★★★★
2	Macroni	35	★★★★★
3	Normal Maggi	27	★★★★★

The right screenshot shows the 'Pending Orders' section with three pending orders:

Order No.	Roll No.	Item	Quantity	Amount	Served?	Payment Done?
51	210815	Chowmein	1	Rs.32	✓	✓
51	210355	Veg Kabab	1	Rs.35	✓	✓
51	210921	Bhelpuri	1	Rs.35	✓	✓

10. Canteen Owner - Pending Orders

This page will contain the orders that are yet to be served or whose payment has not been done yet. It shall also allow the canteen owner to update the serving status and the payment status of the orders.

11. Canteen Owner - New Orders

This page will show incoming orders to the canteen owner and allow him/her to either accept or reject the order according to the availability of the item ordered.

S.No.	Roll No.	Item	Quantity	Amount	Accept/Reject Order
1	210356	Maggi	1	Rs.27	
2	210264	Masala Dosa	2	Rs.25	
3	210474	Sweet Corn Soup	1	Rs.25	

Order No.	Roll No.	Item	Quantity	Amount	Served?	Payment Done?
51	210815	Chowmein	1	Rs.32		

12. Canteen Owner - Search by Student

This page will show the pending orders of a student according to their roll number to the canteen owner. He/She shall enter the roll number of the student to view their pending orders. It shall also allow the canteen owner to update the serving status and the payment status of the orders.

13. Canteen Owner - Modification

This page allows the canteen owner to modify the current menu. He/She can modify the price of an item, add a new item or delete an existing item from the menu.

Item No.	Item	Price	Modify	Delete
1	Tomato Soup	Rs.27		
2	Veg Soup	Rs.30		
3	Hot n Sour	Rs.30		

Roll No.	Name	Amount Pending
210005	Aristotle	Rs.247
210162	Benjamin	Rs.574
210235	Darwin	Rs.861

14. Canteen Owner - Student Bill

This page will show the pending bill of students, roll number wise, to the canteen owner. He/She cannot modify the amount in the pending bill of any student.

15. Canteen Owner - Current Menu

This page will show the current menu to the canteen owner. It shall contain the name of the item, their rate and rating. He/She cannot modify the rating of the items.

The left screenshot shows the "View Current Menu" section with the following data:

Item No.	Item	Price	Rating
1	Maggi	Rs.27	★★★★★
2	Masala Maggi	Rs.29	★★★★☆
3	Special Maggi	Rs.32	★★★★★
4	Macroni	Rs.35	★★★★☆

The right screenshot shows the "Today's Menu" section with the following data:

Day	Meal	Item	Calories	Rating	Feedback
Monday	Breakfast	Sandwich	250 cal.	★★★★★	Your feedback...
Day	Meal	Item	Calories	Rating	Feedback
Monday	Lunch	Aloo kulcha	900 cal.	★★★★★	Your feedback...
Day	Meal	Item	Calories	Rating	Feedback
Monday	Dinner	Veg Biryani	800 cal.	★★★★★	Your feedback...

16. Mess Student - Regular Menu

This page will show the menu of the day as well as the overall menu in the mess and the calories associated. It will also allow the student to give ratings and feedback.

17. Mess Student - Extras Menu

This page will show the extras available on that day, in the time limit of booking. The status will show whether an order is rejected, accepted or waiting for action. The student has to click on the OK button after receiving the order.

The left screenshot shows the "Menu" section with the following data:

Item no.	Item	Status	Quantity	Rate	Rating	Feedback
1.	XYZ_1	Book	-	Rs.27	★★★★	Your feedback...
2.	XYZ_2	Pending	1	Rs.50	★★★★	Your feedback...
3.	XYZ_3	Rejected	1	Rs.30	★★★★	Your feedback...
4.	XYZ_4	Accepted	2	Rs.15	★★★★	Your feedback...

The right screenshot shows the "Rebate" section with the following fields:

- From: DD/MM/YYYY
- To: DD/MM/YYYY
- Apply
- Cancel

18. Mess Student - Apply for rebate

This page will be used to apply for rebates by the student. If the rebate gets rejected it would be mailed to the student.

19. Mess Manager- Modify Menu

This page allows the mess manager to modify the current mess menu. He/She can modify any item, add calorie specifications, add a new item or delete an existing item from the menu.

Day	Meal	Item	Calories	Modify	Delete
Monday	Breakfast	Burger Milk	295 calories 42 calories	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
Monday	Lunch	Aloo Kulcha	221 calories Butter Chicken	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
Monday	Dinner	Veg Biryani	241 calories Paneer Paratha	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
Tuesday	Breakfast	Masala Dosa	387 calories	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>

Meal	Item	Price	Start Time	End time	Modify	Delete
Lunch	Fish Cutlet	Rs.27	12:00	13:00	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
Lunch	Bhel Puri	Rs.10	12:00	12:45	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>

20. Mess Manager- Extra Items

This page allows the mess manager to modify the extra items in the menu. He/She can modify the price of an item, booking time of an item, add a new item or delete an existing item from the menu.

21. Mess Manager- View Orders

This page will show incoming orders of the extra items to the mess manager. He/She can check the number of orders available.

Item	No. of orders
Paneer Roll	25
Butter Chicken	10

Roll No.	Name	Date	Meals	Rating	Feedback
210005	Aristotle	21/01/2023	Lunch	★★★★★	Happy with food quality
210264	Benjamin	21/01/2023	Lunch	★★★★★	The food tastes great
210474	Darwin	21/01/2023	Dinner	★★★★★	Dinner was very nice

22. Mess Manager- View Feedback

This page will show the feedback and ratings by students to the mess manager. He/She cannot modify the ratings or feedback given by any student.

23. Mess Manager - Rebate Requests

This page will show the rebate requests by students to the mess manager. He/She can approve or reject the requests.

The image contains two side-by-side screenshots of a web-based portal. Both screenshots have a header bar with the university logo, the title "Unified Portal For Hall Automation", and a welcome message "Welcome, Kriti Mess Manager Hall 6". Below the header is a navigation bar with icons for Home, Mess, Canteen, Booking, Cleaning, My Account, and Log Out.

Left Screenshot (Rebate Requests):

- Section Title:** Rebate Requests
- Table Headers:** Roll No., Name, Starting date, Ending date, No of days, Approve/Reject Request
- Data Rows:**
 - Roll No. 210356, Name Aristotle, Starting date 10/01/2023, Ending date 20/01/2023, No of days 10, Approve/Reject Request (green checkmark, red X)
 - Roll No. 210264, Name Benjamin, Starting date 11/01/2023, Ending date 16/01/2023, No of days 5, Approve/Reject Request (green checkmark, red X)
 - Roll No. 210474, Name Darwin, Starting date 13/01/2023, Ending date 25/01/2023, No of days 12, Approve/Reject Request (green checkmark, red X)

Right Screenshot (Students' Pending Bills):

- Section Title:** Students' Pending Bills
- Table Headers:** Roll No., Name, Month, BDMR, Basic Amount, Extra Messing, Rebate Dues, Modify
- Data Rows:**
 - Roll No. 210005, Name Aristotle, Month June, BDMR 80, Basic Amount 2400, Extra Messing 250, Rebate Dues 0, Modify (pencil icon)
 - Roll No. 210264, Name Benjamin, Month June, BDMR 80, Basic Amount 2400, Extra Messing 100, Rebate Dues 500, Modify (pencil icon)
 - Roll No. 210474, Name Darwin, Month June, BDMR 80, Basic Amount 2400, Extra Messing 480, Rebate Dues 200, Modify (pencil icon)

24. Mess Manager - Student Bill

This page will show the pending bill of students roll number wise to the mess manager. He/She can modify the BDMR in the pending bill of all students.

25. Cleaning section - Lodge Request

In the cleaning section we have three subsections : Lodge requests, Pending requests and Past requests.

The Lodge requests section will facilitate lodging a cleaning request. It first shows the users room then asks to choose which place to clean, as of now there are four options: room, toilet, corridor, and for special cases other options. There is also a comment box in which user can provide other necessary information along with the preferred time for the service. The user must provide his/her phone number and also the working hours in which slot he/she will not be available. Finally there is a submit button to submit the request pressing which the user will be taken to the pending request section showing his new request.

Welcome, Sandeep Nitharwal
Roll No : 210921
Hall 2

Unified Portal For Hall Automation

Home Mess Canteen Booking Cleaning My Account Log Out

Lodge Request

Your Room : XXXX

What to Clean : Room Toilet Corridor Other (Enter in comments)

Comments :

Phone Number : [REDACTED]

Preferred time : [REDACTED] **Submit**

© Unified Portal For Hall Automation

SI No.	Date	Time	Place	Action
1	21 Jan	12:45	Room	Actions
2	14 Dec	16:50	Room	Actions
3	16 Nov	18:01	Toilet	Actions

SI No.	Date	Name :- Labajyoti Das	Place	Action
1	21 Jan	Room No. :- B312	Room	Actions
2	14 Dec	Date of request :- 21 Jan 2023	Room	Actions
3	16 Nov	Rate:- ★★★★☆	Toilet	Actions

© Unified Portal For Hall Automation

26. Cleaning section - Pending Requests

The Pending requests section shows all the pending requests in a tabular form containing the date, time, place and an Action button which when pressed against a particular request which gives a popup and shows the relevant request information along with rating bar and a button to mark the request as complete.

27. Cleaning section - Past Requests

The last section is the Past request section which stores all the past requests in a tabular form and the table contains information like date, time, place and rating.

Date	Time	Place	Rating
21 Jan	12:45	Room	★★★★★
14 Dec	16:50	Room	★★★★★
16 Nov	18:01	Toilet	★★★★★

Guest Room Booking:

- Check in Date: DD/MM/YY
- Check out Date: DD/MM/YY
- Facilities :-

 - Double Bed Room
 - Attached Bathroom
 - AC

- Price per Night :-

 - ₹300/- One person
 - ₹400/- Two person

28. Booking - Guest Room

This section is used for booking Guest Rooms available in the Hall. The user has to specify the dates from when to when he/she wants the room to be booked. If the room is already booked the user won't be allowed to proceed to book.

29. Booking - Sports Equipment

This section is used for issuing sports equipment available in the hall. It shows the quantity of the available equipment ,the roll no. of the earliest person who has issued that item and the sports items that were issued by you. The unavailable items and items that the user has issued before cannot be issued.

Equipment	Issued to	Your Issues	Quantity	Book
Cricket Bat	<input type="button" value="View List"/>	✗	5	<input type="button" value="Book"/>
Football	<input type="button" value="View List"/>	✗	4	<input type="button" value="Book"/>
Basketball	<input type="button" value="View List"/>	✗	6	<input type="button" value="Book"/>
TT Raquet	<input type="button" value="View List"/>	✓	8	<input type="button" value="Book"/>

Sports Equipment Booking:

Sports	Time Slot	AM/PM	Day	Availability
Gym	6 - 7	AM	Mon	Yes

Book

30. Booking - Sports Court

This section deals with booking of Sports Court slots. If the selected time slot and day has a vacancy the user can book that slot for himself.

31. My Account-Mess

This portal will show the monthly mess bills of each student with its payment status and will also have an option to pay specifically the mess bills only. They can see the bills of every past month by clicking the option of showing all months drop down list.

Month	Year	Amount(in Rs.)	Status
December	2022	2546	<input type="checkbox"/>
Month	Year	Amount(in Rs.)	Status
December	2022	2546	<input type="checkbox"/>
Month	Year	Amount(in Rs.)	Status
December	2022	2546	<input checked="" type="checkbox"/>

32. My Account-Canteen

This portal will show the monthly canteen bills of each student with its payment status and will also have an option to pay specifically the canteen bills only. They can see the bills of every past month by clicking the option to show all months' drop down list.

33. My Account-Electricity

This portal will show the monthly electricity bills of each student with its payment status and will also have an option to pay specifically the electricity bills only. They can see the bills of every past month by clicking the option to show all months' drop down list.

Month	Year	Amount(in Rs.)	Status
December	2022	2546	<input type="checkbox"/>
Month	Year	Amount(in Rs.)	Status
December	2022	2546	<input type="checkbox"/>
Month	Year	Amount(in Rs.)	Status
December	2022	2546	<input checked="" type="checkbox"/>

34. My Account-Accounts

This portal will have the combined dues of all three services as mess, canteen and electricity and an option for their combined payment. User can also get their payment history.

3.1.2 Hardware Interfaces

- Hardware required to connect to the internet. For example, Modem, Network Card, Network Connection, etc.
- A device with an active internet connection. It can be a phone, a tablet, a desktop, anything with internet access, and a browser.
- We will be requiring a web server to host our website on the server side.

3.1.3 Software Interfaces

- Client Side - an operating system (Windows, macOS, Linux, etc.), a web browser.
- Server side - Web server, Database

3.2 Functional Requirement

1. Authentication

1(a). **login_user(user_type,user_roll/phone_number,user_password)**

This function will login the user based on whether he/she is staff or student.

1(b).

system_confirm_password(user_type,user_name,user_roll,user_password_real, user_password_input)

This function will confirm the user's password entered.

2. **user_id= New_user_login(user_type)**

This will generate the user_id for every new user.

3. **New_user_staff(user_name, user_phone, user_hall, user_designation, authorization_no)**

This will register new staff users.

4. **New_user_student(user_name, user_roll, user_hall, user_room)**

This will register new student users.

5. **system_otp_generate(user_type, user_name, user_mail/user_phone)**

This will generate the otp for users while registering.

6. **system_otp_confirm(user_type,user_name,user_roll/phone,otp_recieved)**

This will confirm the user's entered otp with the generated otp.

7. **system_reset_password(user_type, user_name,user_roll/phone, new_password)**

This will reset the user's new password as the original password.

2. Canteen

2.1 User – Student

1. **rate_food_item(user_id, food_id, input_rating)**
The function will register every user's rating for a particular food item.
2. **order_id_issued=place_order(user_id, cart_id)**
This will generate an id for every order made.
3. **cart_id = create_cart(user_id, food_id_array, specification_input_array)**
This will create an id for each cart made by the user before ordering.
4. **payment_confirmation(user_id, order_id_issued)**
This will confirm the payment by a user for his/her order.
5. **print_canteen_transaction_history(user_id)**
This will give user's their transaction history at the canteen.

2.2 User – Canteen Manager

1. **food_id=Add_item(food_name, price)**
This will create a food id for each item on the menu.
2. **remove_item(food_id)**
The manager can remove any food item from the menu.
3. **food_status(food_id, status=(available/unavailable)?)**
This will modify the availability of food items.
4. **price_modify(food_id, new_price)**
This will modify the price of any food item.
5. **print_pending_orders**
This will print the pending order of the day for the manager.
6. **order_response(order_id, input==(reject/accept)?)**
This will either accept or reject the order made by the user.
7. **order_ready(order_id)**
This will update the status of order to "ready".
8. **student_order_search(user_id)**
The canteen manager can search the order of any student.
9. **payment_function:**
 1. **payment_accept(user_id, order_id)**
This will be the payment confirmation by system.
 2. **payment_option(user_id, order_id)**
This will give the user the option to either due it or pay by upi.
 3. **payment_settle(user_id, order_id)**
This will be used when the manager will settle the payment.

3. Mess

3.1 User-Mess owner

1. **print_feedback**
This will print the feedback of the mess menu for the owner.
2. **food_id = Add_item(food_name, calorie_info)**
This will add any food item to the menu.
3. **remove_item(food_id)**

- This will remove any food item from the menu.*
4. **extra_food_id = add_extra_item(food_name, food_price, max_booking_limit)**
This will add any extra food into the extra menu.
 5. **update_extra_item(extra_food_id)**
This will update any extra menu.
 6. **remove_extra_item(extra_food_id)**
This will remove any extra food item.
 7. **rebate_request(user_id, time_slot)**
This will make a rebate request from the student's end.
 8. **print_student_bills**
This will print the pending bills of all the students.
 9. **rebate_request_response(user_id)**
This will confirm the user's rebate request.
 10. **bdmr_update**
Manager can update the BDMR.

3.2 User-Student

1. **display_today_menu**
This will display the present day mess menu to the student.
2. **order_id=book_extra(user_id, extra_food_id, quantity)**
This will generate an order id for each extra food issued.
3. **Confirmation_student(user_id, order_id)**
This is to confirm by the manager that the user received the order.
4. **rate_extra_item(user_id, extra_food_id)**
This is to rate the extra item.
5. **system_order_response(order_id)**
This is to reject the order if it isn't received within time.
6. **lodge_rebate(user_id, time_slot)**
This allows the student to lodge a rebate request.
7. **system_rebate_confirmation(user_id)**
This lets the student know if the rebate request has been accepted.

4. Bookings

1. **display_equipment_details(equipment_id)**
This will display the details of an equipment given the id of that equipment.
2. **return_equipment(equipment_id, secy_input)**
This will update that the equipment has been returned to the sports secy given the id of the equipment and confirmation by the sports secy.
3. **issue_equipment(user_id, equipment_id)**
This will update the issue status of an equipment given the id of the equipment and the id of the student to which the equipment has been issued.
4. **system_return_confirm(equipment_id)**
This will confirm that the particular equipment has been returned.
5. **display_court_details(court_id)**
This will display the availability details of the court given the id of the court.
6. **book_court(court_id, slot)**

This will book the court given the id of the court and the time slot during which the court is to be booked.

7. display_gym_details(gym_id)

This will display the availability details of the gym.

8. book_gym_slot(gym_id,slot)

This will book a gym given the time slot during which the gym is to be booked.

9. display_guest_room_availability

This will display the availability details of the guest room.

10. book_room(user_id,payment_status, slot)

This will book a room given the id of the student who wants to book a guest room, confirmation of the payment by the hall manager, and duration for which booking is to be done. This will generate a unique payment id.

11. system_payment_confirm(user_id, payment_id)

This will confirm if the payment done by the student has been received or not given the id of the student and payment id.

5. Cleaning Services

1. request_id = lodge_request(user_id,time_slot)

Records complaints in the database after generating the request ID, and returns the request ID.

2. preview_request(request_id)

Organises information submitted and generates an instance of a complaint object to be displayed to the user, before confirmation.

3. system_request_assign(request_id_array)

Fills the “assigned_id” field with the employee ID when a cleaning request is assigned to them.

4. rate_service(request_id, user_id)

Stores the rating assigned by users in the tables containing requests raised by the user and the list of workers.

5. confirm_service(request_id,user_id)

Updates the status of a request to completed when users mark requests complete on the portal.

6. print_lodged_requests(user_id)

Fetches details of requests lodged by a particular user and filters them for pending and recent requests to be displayed.

6. Accounts and Billings

1. display_mess_bill(user_id)

This will display a till-date mess bill to the student.

2. display_canteen_bill(user_id)

This will display the till-date canteen bill to the student.

3. display_electricity_bill(user_id)

This will display the electricity bill of the previous month to the student if he/she has not paid the bill.

4. payment_id=payment_generate(user_id,payment_type)

This will generate a unique payment id given user id of the student and payment type (on-spot payment or payment to be done later).

5. system_payment_check(payment_id)

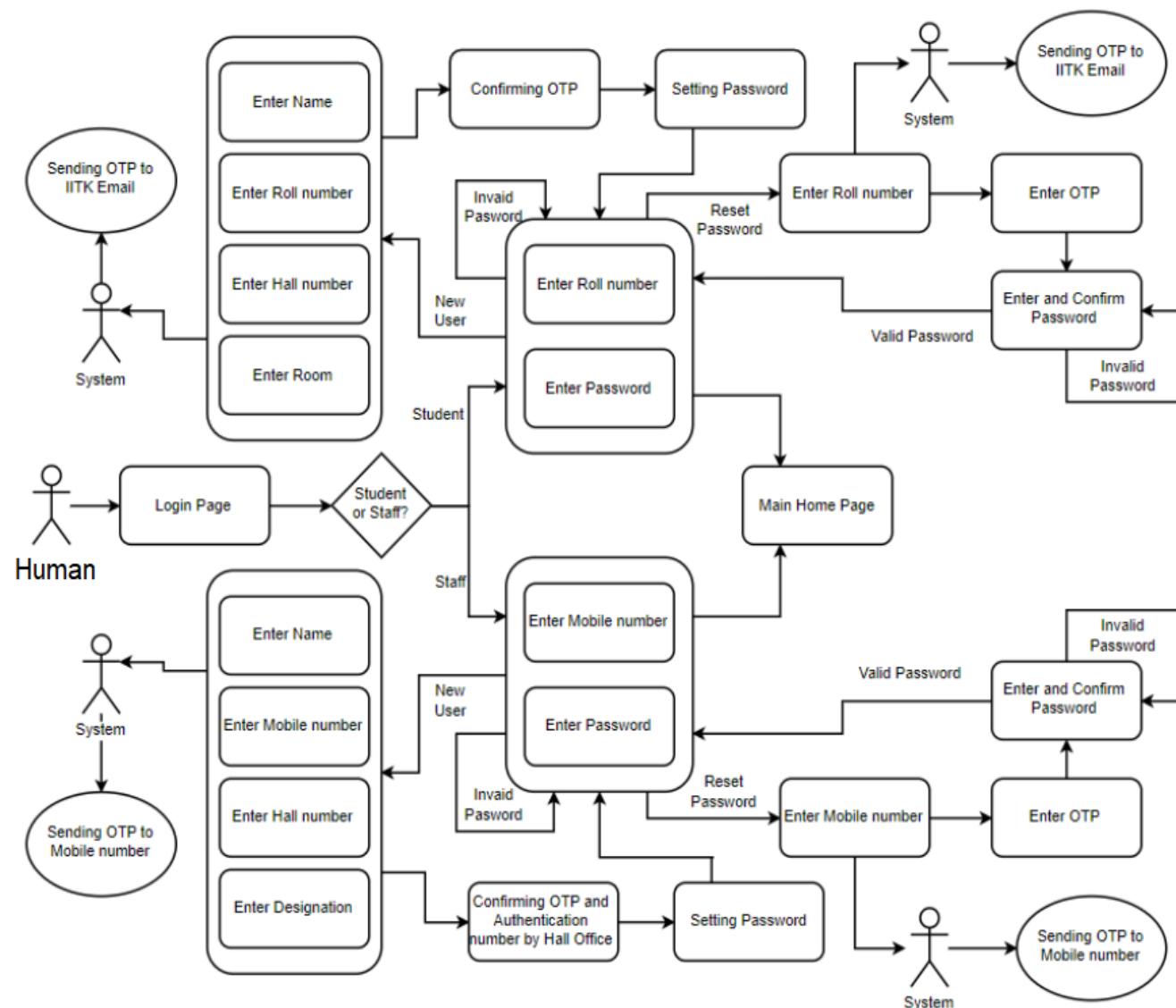
This will confirm if the on-spot payment done by the student has been received or not.

6. system_payment_authorize(user_id, user_mail)

This will send a notification to the student that the on-spot payment done by him/her has been received.

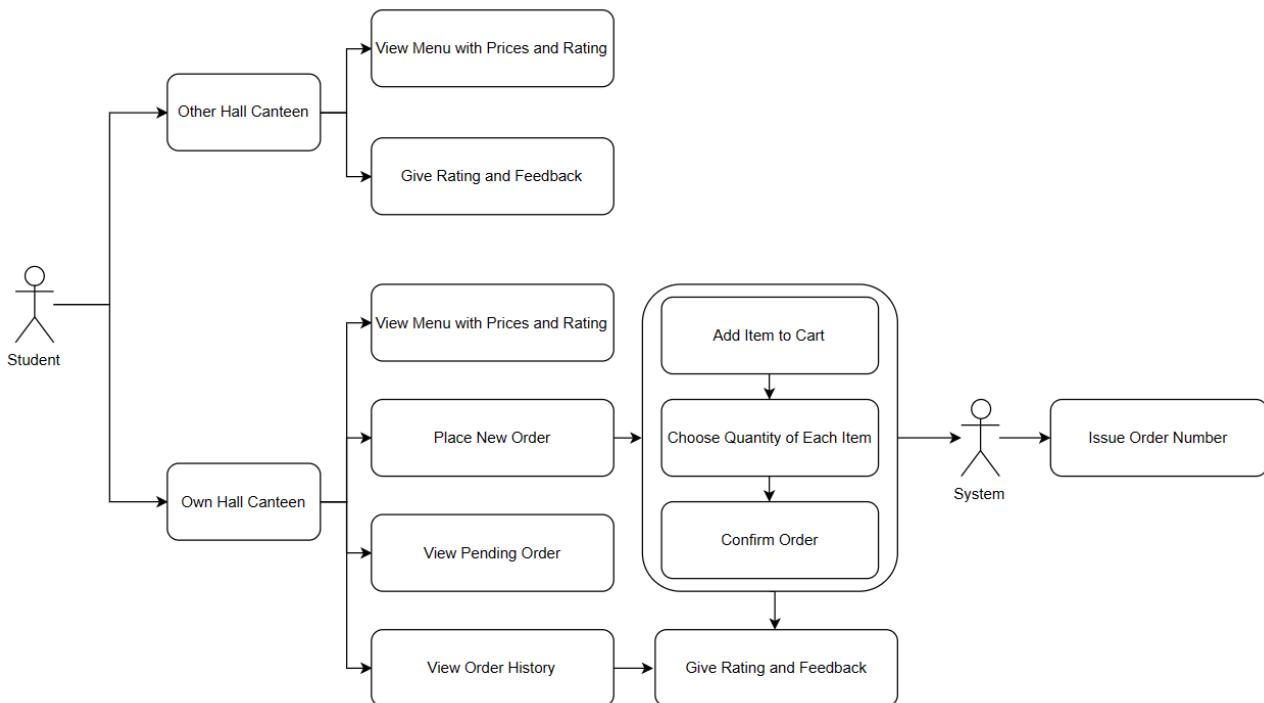
3.3 Use Case Model

3.3.1 Use Case #1: Authentication



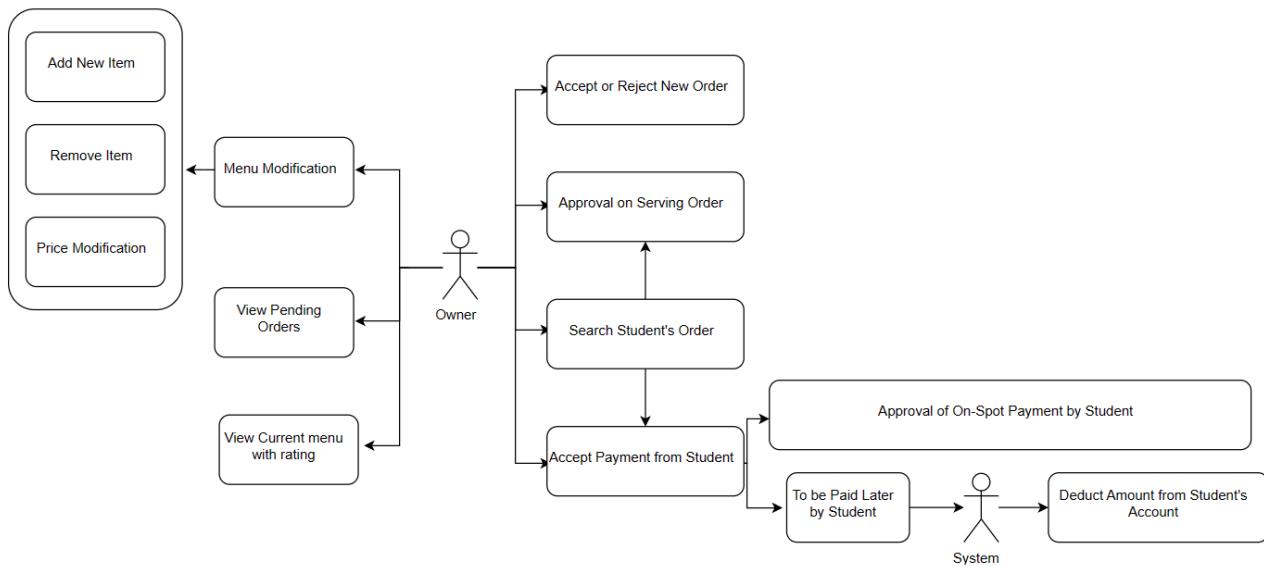
Use Case No.	Use Case #1
Author	Harsh Mohan, Labajyoti, Soham Bharambe
Purpose	To authenticate valid users.
Requirements Traceability	Sign up interface, Login interface, Reset password interface, Student and other user credentials and Passwords.
Priority	High
Pre conditions	Users must have their required credentials.
Post conditions	The user is logged in and is able to interact with the system.
Actors	Human and system.
Exception	Technical Team
Includes	None
Notes/Issues	OTP could not be sent for any reason then users might not be able to reset password and new users might not be able to login.

3.3.2 Use Case #2: Canteen User- Student



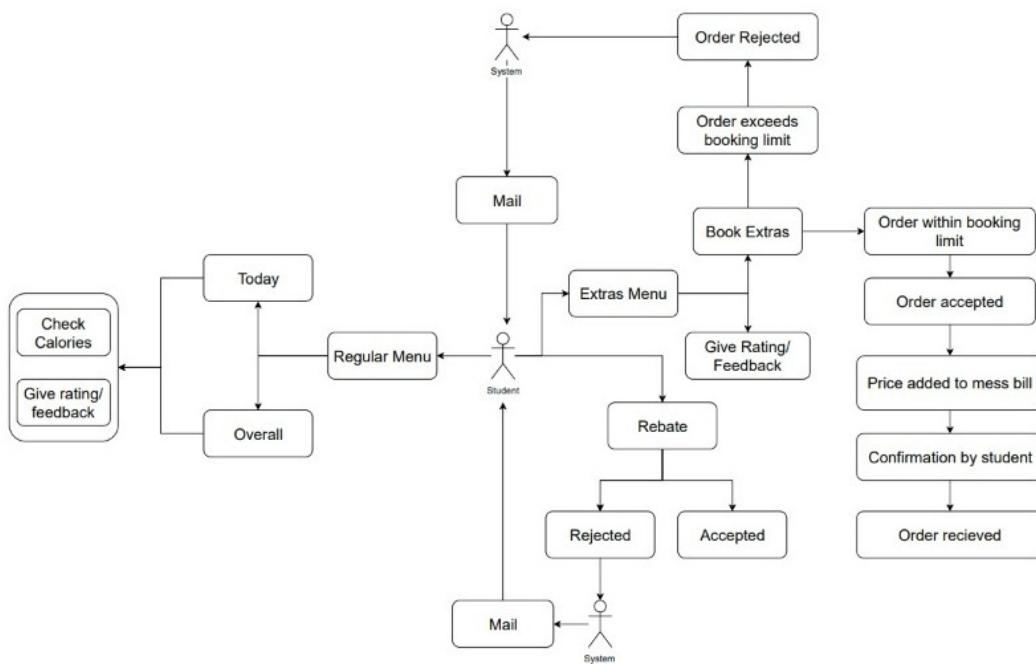
Use Case No.	Use Case #2
Author	Rajeev Kumar
Purpose	Utilise various canteen services as a student.
Requirements Traceability	Canteen Menu with ratings and Prices, Feedback and Rating interface.
Priority	High
Pre conditions	Students must be logged in.
Post conditions	Place an order and access to Canteen's catalog and rating.
Actors	Student, System.
Exception	Menu item list, prices and their rating may differ while placing the order
Includes	Use case#1
Notes/Issues	Students can't place orders in the Other hall Canteen.

3.3.3 Use Case #3: Canteen Owner



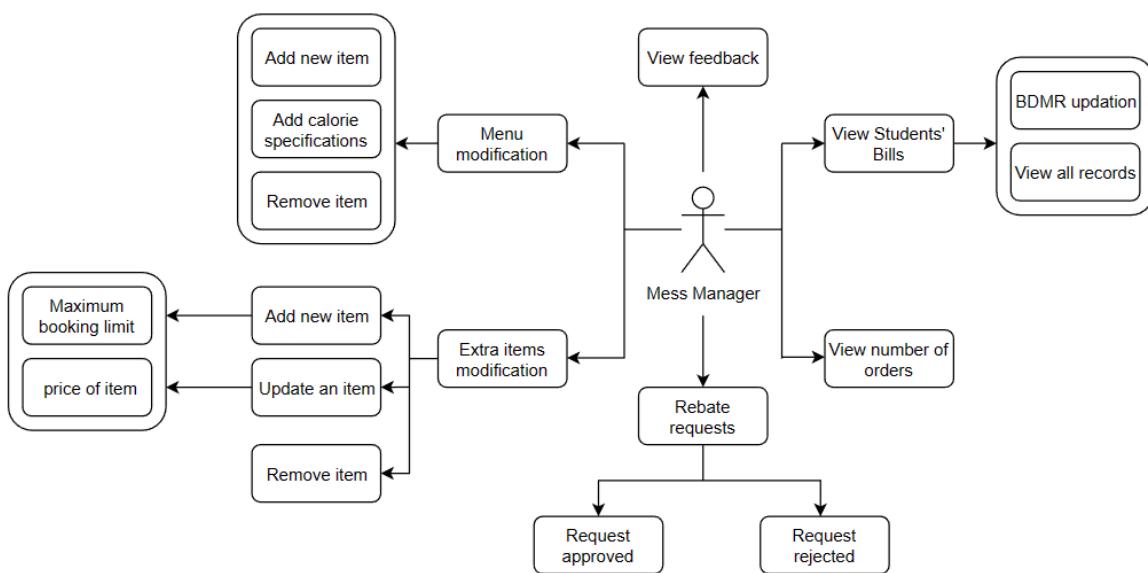
Use Case No.	Use Case #3
Author	Divyansh Chhabria
Purpose	Provide canteen services as the owner
Requirements Traceability	Canteen owner interface, Order details.
Priority	High
Pre conditions	Owner must be logged in
Post conditions	Accept or reject orders
Actors	Canteen Owner, System
Exception	None
Includes	Use case#1
Notes/Issues	None

3.3.4 Use Case #4: Mess User- Student



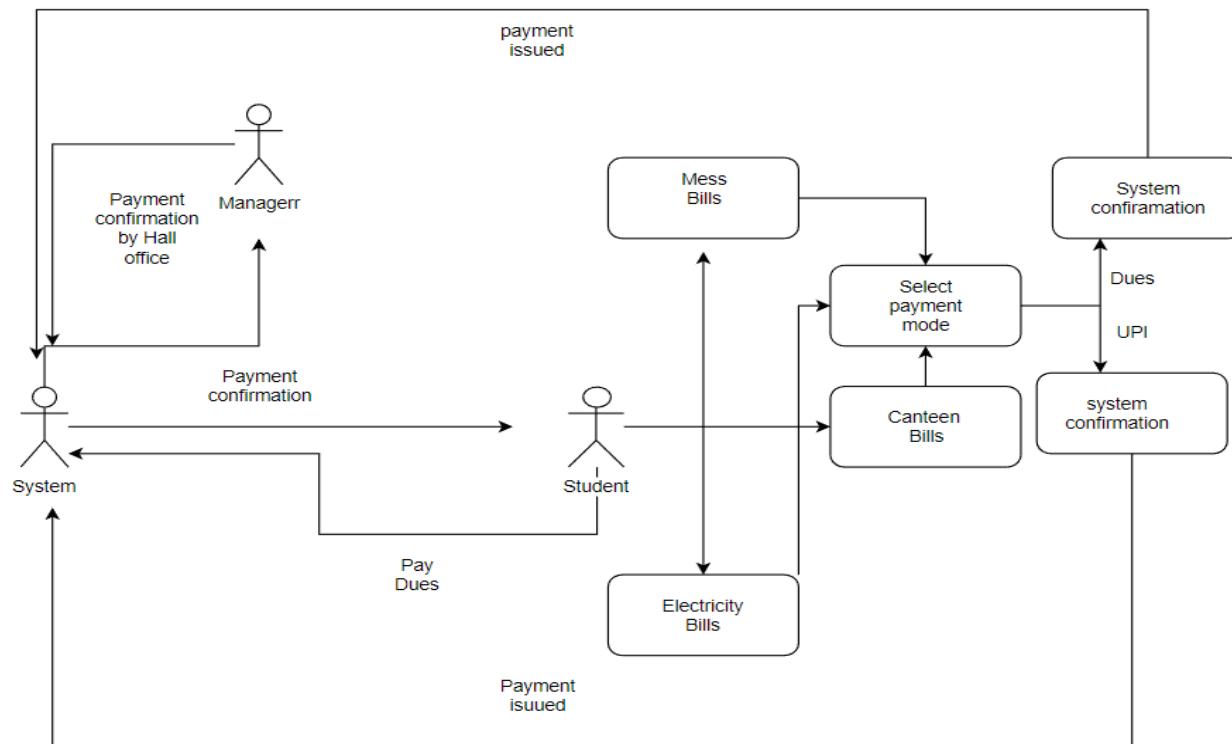
Use Case No.	Use Case #4
Author	Jhalak Sharma
Purpose	Utilise various Mess services as a student.
Requirements Traceability	Student Email ID, Mess Menu with Calories details, Extra's Menu with Prices. Rating and Feedback details, Rebate interface.
Priority	High
Pre conditions	Student must be logged in
Post conditions	Place an order for extra's, access to Mess's catalog and rating and filling of Rebate form.
Actors	Student, Mess Manager, System
Exception	Extra's Menu item list, prices and their rating may differ while placing the order
Includes	Use Case #1
Notes/Issues	None

3.3.5 Use Case #5: Mess Manager



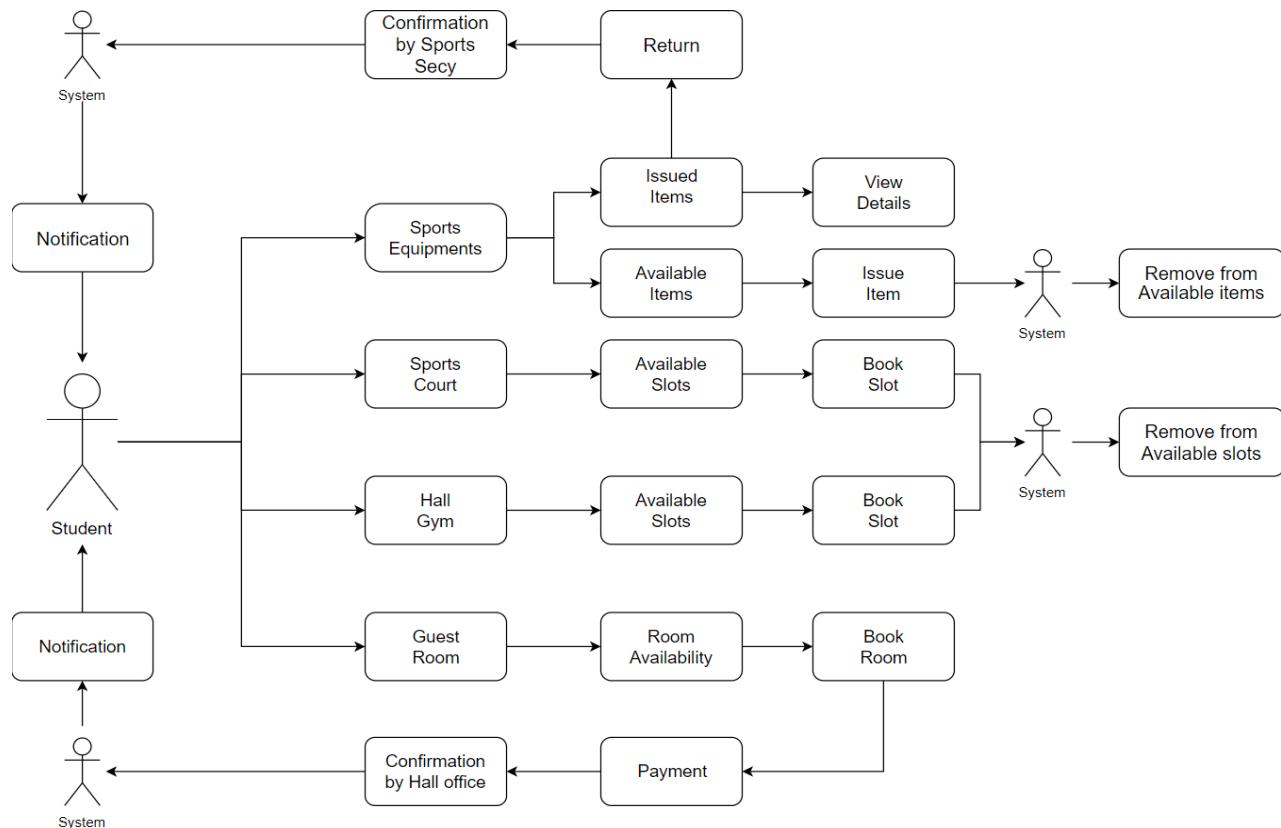
Use Case No.	Use Case #5
Author	Kriti
Purpose	Provide canteen services as the owner
Requirements Traceability	Mess Manager interface, List of Rebate request for Approval, List of Extras booking, List of Student's Bill, Menu details for modification.
Priority	High
Pre conditions	Mess manager must be logged in
Post conditions	Accept or Reject Rebate request, Able to modify Menu and Extra's.
Actors	Mess Manager
Exception	None
Includes	Use Case #1
Notes/Issues	None

3.3.6 Use Case #6: Account and Billings



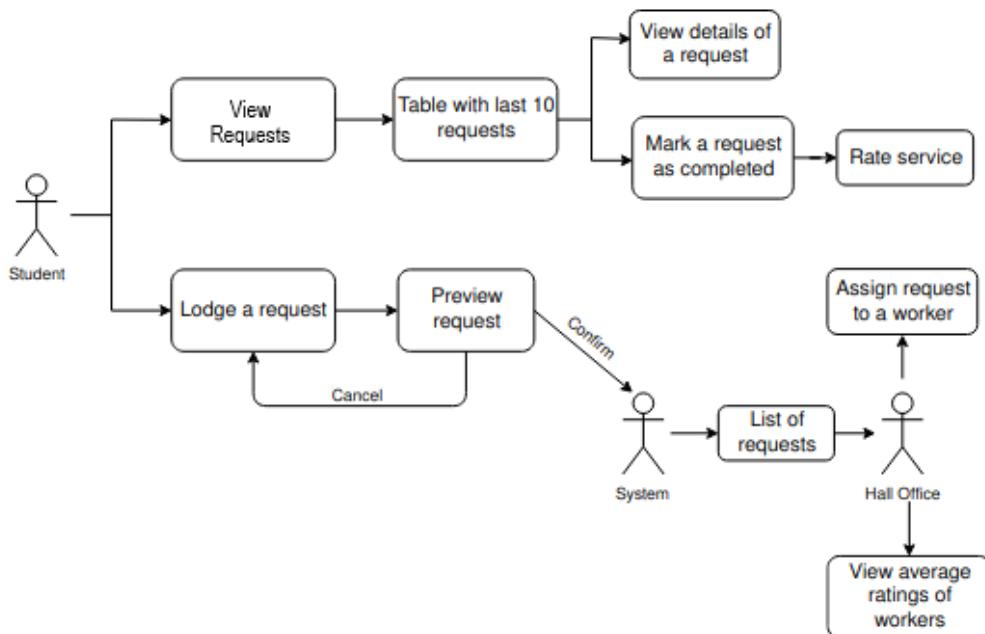
Use Case No.	Use Case #6
Author	Divyansh
Purpose	Payment of bills and Transfer of money to wallet
Requirements Traceability	Payment interface, List of all bills and Wallet interface.
Priority	High
Pre conditions	Students must be logged in.
Post conditions	Change in student wallet amount and Clearance of bills.
Actors	Student and system
Exception	None
Includes	Use Case #1
Notes/Issues	None

3.3.7 Use Case #7: Bookings



Use Case No.	Use Case #7
Author	Sandeep Nitharwal
Purpose	Students are able to do bookings of various facilities.
Requirements Traceability	Student Email ID, List of all sports equipment and their availability, List of available slots for Hall Gym and Sports courts, Details of room availability in guest room.
Priority	High
Pre conditions	Students must be logged in.
Post conditions	None
Actors	Student, Hall Manager, System, Sports Secy.
Exception	None
Includes	Use Case #1
Notes/Issues	OTP could not be sent for any reason. Email validity to be checked. Item availability might change during processing the order

3.3.8 Use Case #8: Cleaning Services



Use Case No.	Use Case #8
Author	Pranjali
Purpose	Utilise the Cleaning service of the Hall.
Requirements Traceability	Student details , Cleaning Services interface, List of workers.
Priority	Medium
Pre conditions	Students must be logged in.
Post conditions	Cleaning request will be lodged.
Actors	Student, Hall Manager, System.
Exception	None
Includes	Use Case #1
Notes/Issues	None

4 Other Non-functional Requirements

4.1 Performance Requirements

Speed of Response and Execution: Being an interactive web-based application, there could be a delay in receiving orders or showing the confirmation signal. For saving details to the DB or for fetching them from DB, there should be a delay of less than 3 seconds. For showing up the confirmation of acceptance/cancellation of an order, booking mess extras, availing cleaning services and guestrooms, the delay should be below 5 seconds. For saving the user's choices and settings, it shouldn't take more than 4 seconds.

Concurrent user capacity: Given that the only situation of multiple users at a time is when the students are placing orders in the canteen, **one-fourth of the campus strength will be enough to consider, i.e., 2000.**

Storage: For storage allocation, we would assume-

- it must be capable of storing 7000 profiles, including students and other officials.
- it must be capable of storing feedback, track of spending, and order catalog of all student profiles of around 6500 in number.

4.2 Safety and Security Requirements

- **Mandatory Login:** The software authenticates the user by asking for the id and password which is saved in the database. For the first-time user, we shall use IITK email id for the OTP verification and then users add their username and password in the databases. There is also a feature to create a new password using email id, in case any user forgets the password.
- **Encryption:** All sensitive information such as passwords should be stored in an encrypted format using some encryption schemes.
- **Confidentiality and Privacy:** The email id provided by the user shall not be disclosed in any form without the consent of the user. Same applies for other personally identifiable user data.
- **Integrity and Backup:** The software should not corrupt or damage the data of the user in any form. The software shall keep the backup of required files so that in case of any data loss we can copy the data from backup.

4.3 Software Quality Attributes

- **Availability** -The application will be available and accessible to every user inside the campus. We will deploy the software on the device provided by the Computer Center. Since Computer Center works 24/7, we expect our software to give full time availability in normal case scenarios.

- **Interoperability** - The operation of this application will not interfere with any other application operating simultaneously on the device. While using the software, users can operate any other application simultaneously, and resume using the recent screen/browser tabs. This will ensure the interoperability of the application.
- **Compatibility** - The web-based interaction enhances compatibility over different devices. This also makes the software portable and modular. Different users have different operating systems on their devices, and they shall experience the same environment over different systems. It would be adaptable to other internet browsers. We are providing multiple device login in our software. This will increase portability.
- **Scalability** - The software should be able to accommodate any future Hall, canteen and mess that may be opened in IITK campus.
- **Maintainability** - We are planning to do the coding part by pair programming in which after writing some code instead of checking ourselves we can ask our partner to check and vice-versa so that at the end we would have less chances of bugs. And we are doing this on git so as to retrieve previous versions easily in case of some failure in the current version. Also we will try to comment on each and every part of the code so that it is clear for the other state holder what is the use of the particular function or object.
- **Consumability** - A user-friendly interface and its facilities will make the use of the application quite intuitive and useful for the new users. The rating system can be used to compare the prices and quality of food items of different canteens. Other features of the application will help everyone to save time by placing the orders in canteens before time preventing the reduction of sitting time. Also, Extra's of mess can be booked preventing the long queues for extra's and many more.
- **Resource Utilization** - Major resources required by our software are just a good internet connection and a stable and reliable server, which smoothens and fastens the tasks.

Data Dictionary

A.1 List of users (residents and employees)

Name of field	Datatype	Description, Comments and default value	Example
username	string	Not to be confused with the Computer Centre username (in email ID). Referred to as user_ID at some places.	psingh22
rollno	string	Roll number assigned at the time of admission	210744
name	string	-	-
passwd	string	Password, different from passwords for other institute portals	-
designation	string	The role and rights assigned to users in the portal.	'student', 'exchange', 'summer', 'hall_office', 'canteen owner', etc
hall	string	Which hall the resident/staffer belongs to. Not for system admin	'4'
room	string	Current room number	"F204"
mess_c	float	Mess dues in the current month, only for residents. Does not include the basic messing cost as average BDMR is determined on a monthly basis.	445.00
mess_p	float	Only for residents. Stores the dues until the last month.	2330.00
mess_fine	float	Fine for late payment of mess dues.	150.00
canteen_c	float	Current month dues for canteen orders. Only for	445.00

		residents	
canteen_p	float	Only for residents. Stores the dues until the last month.	2330.00
canteen_fine	float	Fine for late payment of canteen dues.	150.00
ph_no	string	Mobile number	2597777
otp	int	otp sent, if any. Number stored will be 0 if no OTP has been sent.	_____

A.2 Housekeeping requests that have not been assigned to a worker

This table is for easy access to a list of pending and freshly lodged complaints at the hall office. Exact details of complaints can be fetched from the table containing requests raised by a user. Further, entries in this table are deleted when complaints are marked completed.

Name of field	Datatype	Description, Comments and default value	Example
rollno	string	Roll number or employee number of the person raising the request	-
request_id	string	Reference number for the request	-
assigned_id	string	Employee ID of the worker to whom the request has been assigned.	-

A.3 Table containing cleaning requests raised by a user

One such table shall be created for each user.

Name of field	Datatype	Description, Comments and default value	Example
request_id	string	Reference number of the	-

		cleaning request. Unique across all students in a hall.	
timestamp	date and time	Date and time when the request was lodged	-
status	string	The status of all requests is initially “pending”. It changes to assigned when a worker is assigned the request, “completed” when it is marked completed and “rated” if rating has been done.	“pending”, “assigned”, “completed”, “rated”
assigned_id	string	ID of the worker to whom the request is assigned	-
rating	int	Star rating of the service	4
details	string	Description of the issue	“Cake spilt accidentally in the room. Available after 2 tomorrow.”
where	char	First character of room, corridor, toilet or other, depending on the case.	‘r’, ‘o’

A.4 Records of the housekeeping staff at a particular hall

Name of field	Datatype	Description, Comments and default value	Example
assigned_id	string	unique across all halls. It is being named “assigned” ID to be consistent with other tables.	-
name	string	-	-
remarks	string	-	-
rating_1	int	number of 1-star ratings	-

rating_2	int	number of 2-star ratings	-
rating_3	int	number of 3-star ratings	-
rating_4	int	number of 4-star ratings	-
rating_5	int	number of 5-star ratings	-
ph_no	string	Mobile number of the person	-

A.5 Table storing the housekeeping requests assigned to a particular worker

Name of field	Datatype	Description, Comments and default value	Example
rollno	string	Roll number or employee number of the person raising the request	-
timestamp_request	date and time	when the request was raised	“2022-07-21 14:05:23”
timestamp_completion	date and time	when the request was marked as complete	“2022-07-21 14:05:23”
request_id	string	-	
status	string	-	“pending”, “completed”, “rated”

A.6 Electricity bills of a particular room

Name of field	Datatype	Description, Comments and default value	Example
room	string	Room number	-
no_residents	int	Number of students residing in the room	-
resident_1	string	roll number of the first resident	-

resident_2	string	second resident	-
resident_3	string	third resident	-
resident_4	string	fourth resident	-
current_month	float	Cost of power used in the current month.	-
dues	float	Amount due until the previous month	-
fine	float	Fine for late payment (total accumulated)	-

A.7 List of bookings of a particular guest room

Name of field	Datatype	Description, Comments and default value	Example
booking_id	string	-	-
rollno	string	Roll number of the student or staff who booked the room	-
timestamp_b	date and time	Date and time when the booking was made	-
date1	date	check-in date	-
date2	date	date until when the room is booked out	-
remarks	string	purpose of booking and other details such as who will occupy the room	-
status	int	Whether check-in and check-out have been done, and also payment.	-

A.8 Inventory and sports equipment available on request and courts at a particular hall

Gyms and courts will be booked instead of issued. For them, the timestamp2 field in table A.12 will be used to readily access the same.

Name of field	Datatype	Description, Comments and default value	Example
id	string	Identification number	-
name	string	Contains enough information to uniquely identify the object.	“Basketball Nivia, #3”, “Badminton court 2”
current_issuance_id	string	Refer to the next table.	-
bought_timestamp	date and time	When the article was added to the inventory	“2022-07-21 14:05:23”
remarks	string	-	-
type	int	1 for articles that are issued and returned, 2 for courts/gyms that must be vacated by the users themselves.	-

A.9 Log of issuances of an article/bookings of courts and gym

Name of field	Datatype	Description, Comments and default value	Example
issuance_id	string	unique across all pieces of equipment	-
roll no.	string	Roll number of the student who issued the article	-
timestamp1	date and time	When the article was issued, when a booking begins. Can be in the future.	“2022-07-21 14:05:23”
timestamp2	date and time	When the article was returned, or in case of court	“2022-07-21 14:05:23”

		bookings, until when the booking ended. Can be a future value.	
returned	int	1 if booking was made in advance, 2 if booking was made on-spot and 3 if the article has been returned.	-

A.10 BDMR of a mess

A separate table may be made for each year.

Name of field	Datatype	Description, Comments and default value	Example
date	date	-	"2021-01-26"
bdmr	float	BDMR of the corresponding day	88.52
remarks	varchar	If there was any deviation from the regular menu on that day.	"Special breakfast and lunch for Republic Day. Dinner was not cooked."

A.11 Rebate requests made by a particular student

One table may be made for each month/year.

Name of field	Datatype	Description, Comments and default value	Example
date1	date	Beginning of the rebate period	"2021-01-26"
date2	date	Last day of the rebate period	"2021-01-30"
status	int	Whether it has been approved (1), rejected (2) or cancelled after being granted (3).	-

A.12 List of pending rebate requests in a hall

This list will be used to generate the list of pending requests when the mess manager opens the corresponding tab.

Name of field	Datatype	Description, Comments and default value	Example
rollno	string	-	-
date1	date	First day of the rebate period, for fetching details efficiently.	"2021-01-30"

A.13 Table containing the menu of a canteen or mess

When the weekly menu is viewed, data shall be retrieved by references to individual items. In the first version of the software, this will be used only for the canteens and extras in the mess. Ratings are not applicable for mess extras in this version of the software.

Name of field	Datatype	Description, Comments and default value	Example
id	string	-	-
name	string	-	-
quantity	string	Amount in one serving. Not to be mixed with the number_left which is the count. It will be set to a large negative number if the field is not applicable.	"200 gm", "2 eggs", "1 unit"
number_left	int	Number of pieces/servings left, if applicable. else, a large negative number shall be stored.	-
rating_1	int	number of 1-star ratings.	-
rating_2	int	number of 2-star ratings	-
rating_3	int	number of 3-star ratings	-
rating_4	int	number of 4-star ratings	-

rating_5	int	number of 5-star ratings	-
calories	int	calories in the food item	-
comments	string	General information/remarks, if any.	-
bookings_open	date and time	Time when bookings shall open, if set. Mainly for mess extras, and if there are any canteen dishes available at specific times.	-
bookings_close	date and time	In continuation to bookings_open. Can also be used to refuse all requests for a dish by setting a past date.	-
price	float	cost of the dish	-

A.14 Menu of a meal in a mess

There will be 21 copies of the table for each hall. (One for each meal.)

Name of field	Datatype	Description, Comments and default value	Example
name	string	Name of the food item and quantity, if it is restricted.	BournVita Milk
alt_name1	string	If there is a choice between multiple products	Tea
alt_name2	string	Same as above	Coffee
calories	int	Calories in the item	250
remarks	string	-	-

A.15 List of extras requested at the mess/canteen orders by a user

There shall be separate copies of the table for the mess and canteen. Different sets of functions will be used to maintain them.

The BDMR shall be stored separately and taken into account when generating monthly bills.

Name of field	Datatype	Description, Comments and default value	Example
order_id	string	Unique across all orders in a hall	-
timestamp	date and time	date and time of purchase	"2022-07-21 14:05:23"
product_id	string	-	-
product_name	string	-	-
quantity	int	Number ordered	-
status	string	'preparation' is being used instead of 'accepted' to distinguish delivered orders and orders being prepared. Some of these will not be used in this version.	'pending', accepted, 'rejected', 'served', 'ready'
then_cost	int	Cost of the dish at the time of ordering	-

A.16 Table storing the reviews of a meal

The contents (text) of a review shall be accessed from the table storing orders of an individual user. One such table shall be created for each meal.

Name of field	Datatype	Description, Comments and default value	Example
date	date	-	-
meal	string	-	'b', 'l', 'd'
rollno	string	-	-
rating	int	Star rating out 5	4

text	string	Contents of the review	"Lines were very long"
------	--------	------------------------	------------------------

A.17 All extras requested at the mess

Entries shall be removed from the table after they are rejected/accepted.

Name of field	Datatype	Description, Comments and default value	Example
order_id	string	-	-
roll no.	string	-	-
id	string	ID of the food item requested as in the menu.	-

A.18 List of orders requested at the canteen in a particular hall

There shall be separate copies of the table for pending and delivered/rejected orders. Entries shall be moved from the first to the second upon rejection by the canteen owner or delivery of the order. Details of orders shall be accessed from the list of orders placed by a particular user.

Name of field	Datatype	Description, Comments and default value	Example
order_id	string	-	-
roll no.	string	-	-
status	string	-	"requested", "accepted", "ready", "delivered"

Appendix B - Group Log

Since the beginning of the project our entire team has been very enthusiastic.
 We have formed a WhatsApp group for effective communication.
 We have created a private repository on GitHub for collaborative software development.

S No	Date	Agenda	Duration	Venue
1	10/01/23	Met to discuss which software to build. Later, it was decided by voting.	60 min	RM Building
2	17/01/23	Discussed the draft SRS uploaded by instructor and broad features to include in the software.	50 min	RM Building
3	19/01/23	Reviewed progress and some finer details about the software's features. Decided to meet the next day to decide what would be taken up next.	60 min	RM Building
4	20/01/23	Discussed software specifications. Decided to start making use case diagrams.	50 min	Lecture Hall 20
5	22/01/23	Discussed changes in draft use case diagrams. Distributed sections of the system to make draft UIs. Also discussed some questions about specifications that came up while making use case diagrams.	150 min	RM Building
6	23/01/23	Met the TA and had a general discussion. Asked some general doubts. He gave us some general tips.	40 min	Hall 5 TV Room
7	24/01/23	Discussed the first three sections of SRS and incorporated the changes suggested by the team members on-spot.	225 min	RM Building
8	25/01/23	Prepared the Data Dictionary. Discussed the last section of SRS. Formatted SRS. Finally, drafted the first version of SRS.	240 min	Hall 2 Room No. D343