

DBMS Project Phase-3 Final Report

Project Topic: HOSTEL MESS MANAGEMENT SYSTEM

Group members:

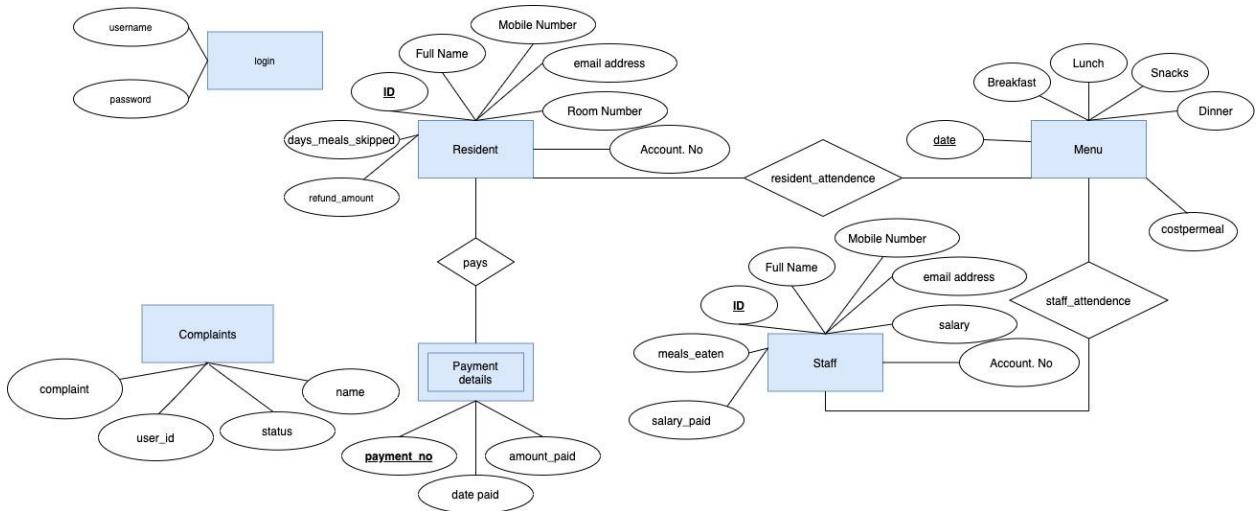
- Srishti Suman (180010035)
- M. Raghavi Reddy (180010022)
- Singamaneni Meghana (180010034)

1. INTRODUCTION:

This is a web application used to manage daily mess attendance and the mess management. Objective of the system is to provide a user friendly daily attendance system that is easy to manage, maintain and query. Our primary focus is to develop a paperless system that provides the management a way to facilitate smoother functioning of the mess system. We intend to reduce the work of mess managers who still maintain all the logs in registers and files. It would be of great benefit as all complex calculations are done within seconds and bills are generated on the single click of a button. As the name suggests, it is an application for maintaining any hostel mess but it also enables handling of the information related to the residents/employees who are a part of the organization.

2. IMPLEMENTATION OVERVIEW:

Module diagram and DB diagram:



Relational Database Schema:

Table	Primary Key	Attributes
Resident	PK ID	full_name, mobile_no, email_addr, account_no, days_skipped, room_no
Resident_attendance	PK,FK1 r_id PK,FK2 date	breakfast, lunch, snacks, dinner, meals_skipped
Menu	PK date	breakfast, lunch, snacks, dinner, costpermeal
Staff_attendance	PK,FK1 s_id PK,FK2 date	breakfast, lunch, snacks, dinner, meals_eaten
Staff	PK ID	full_name, mobile_no, email_addr, account_no, salary, meals_eaten
Pays	PK,FK1 r_id PK,FK2 Payment_no	
Re_fund	PK r_id	refund_amount
login		username, password
Payment_details	PK Payment_no	payment_date, amount_paid
complaints		user_id, complaint, status, name
Paid	PK s_id	salary_paid
Admin	PK id	email_id, full_name

3. DATA USED FOR EXECUTION:

Page Name	Contents Displayed	Database data used	Actual data
login.jsp	Login Form	-	
R_dashboard.jsp, staff_dashboard.jsp, admin_dashboard.jsp	Options	-	
pd_residentServlet.java, pd_staffSerServlet.java	Options & details	Data from resident and staff tables(id, name, mobile number, email address, account number, room number/salary)	Resident table: insert into resident values('R1','9451676215',' gcd@gmail.com ',39749540, 2,'prasanna'); Staff table: insert into staff values('S1','8234579292','keke@gmail.com',26579 8423 ,9500 , 'suresh');
Menu.jsp	Options & menu display	Data from menu table(Breakfast, lunch, Snacks, dinner)	Menu table: insert into menu values(0,'poha,banana',2 0,'rice,dal,curd',30,'magg i',10,'rice,cabbage fry,curd',30);
AttServlet.java, StaffRpServlet.java	Options & report display	Data from resident_att and staff_att tables(r_id/s_id, on_date/date, number of meals skipped/eaten and num. Of days absented in that day/number of meals eaten in that month)	Residence_att table: insert into resident_att values('R1','2014-01-22','yes','no','yes',1); Staff_att table: insert into staff_att values('S1','2014-01-01','yes','yes','yes',4);
PaymentdtServlet.java, NetSalaryServlet.java	Options & payment_details for resident/net salary details for	Data from resident_payment_det ails, staff and staff_att(net salary of	Resident_payment_det ails table: insert into resident_payment_deta

	staff	staff and payment_no, r_id, ayment_date, amount_paid for residents)	<pre> ils(r_id,payment_date,a mount_paid) values('R1','2014-02-01',5 00); Staff table : insert into staff values('S1','8234579292', 'keke@gmail.com',26579 8423 ,9500 ,suresh'); Staff_att table: insert into staff_att values('S1','2014-01-01','ye s','yes','yes','yes',4); </pre>
complaints.jsp, complaints_status.jsp	Options & box for writing complaints & complaint status display.	Data from complaints table.	Complaints table: <pre> insert into complaint('R1','Raju','Food is too salty!!',null); </pre>
Resident_att_update.jsp ResidentAttendanceUpdateServlet Updated.jsp	Updates the attendance of resident and displays success message	-	-
Staff_att_update.jsp Staff Attendance Update Servlet	Updates the attendance of staff and displays success message	-	-
MessBill.jsp	Displays the net amount paid to the staff and net payment made by the residents to the mess and their difference which is net mess bill	Data from tables resident_payment_details, refund, paid, staff_att.	resident_payment_details: <pre> insert into resident_payment_details(r_id,payment_date,a mount_paid) values('R1','2014-02-01',5 00); refund: insert into refund(r_id,refund_am ount) values('R1',190); paid: insert into paid values('S1','2014-02-10',10 000); Staff_att: insert into staff_att values('S1','2014-01-01','ye s','yes','yes','yes',4); </pre>

			s,"yes","yes","yes',4);
ResidentRefundServlet Updated.jsp	Inserts the calculated refunds (if there are any) into the refund table for residents.	Data from refund, residence_att tables.	Refund: insert into refund(r_id,refund_amount) values('R1',190); residence_att insert into resident_att values('R1','2014-01-22','yes','yes','no','yes',1);
SeeComplaints.jsp	Shows the complaints written by the residents and staff to the admin	Data from complaints table.	Complaints : insert into complaint('R1','Raju','Food is too salty!!',null);
MarkComplaints.jsp MarkComplaintServlet Updated.jsp	After resolving the complaints the admin will update the status values in complaints table	Data from complaints table.	Complaints : insert into complaint('R1','Raju','Food is too salty!!',null);
AddResident.jsp AddResidentServlet Added.jsp	Adds a resident to the database(insert) and it also adds the new resident to the login table where the password is given by the admin(he has a option to change password)	Data from resident, login tables.	resident: insert into resident values('R1','9451676215',' gcd@gmail.com ',39749540,2,'prasanna'); Login: insert into login values('R1','raju');
AddStaff.jsp AddStaffServlet Added.jsp	Adds a staff to the database(insert) and it also adds the new staff to the login table where the password is given by the admin(he has a option to change password)	Data from staff, login tables.	Staff: insert into staff values('S1','8234579292','keke@gmail.com',265798423 ,9500 'suresh'); Login: insert into login values('R1','raju');
AddAdmin.jsp AddAdminServlet	Adds a admin to the database(insert)	Data from admin, login tables.	Admin: insert into admin

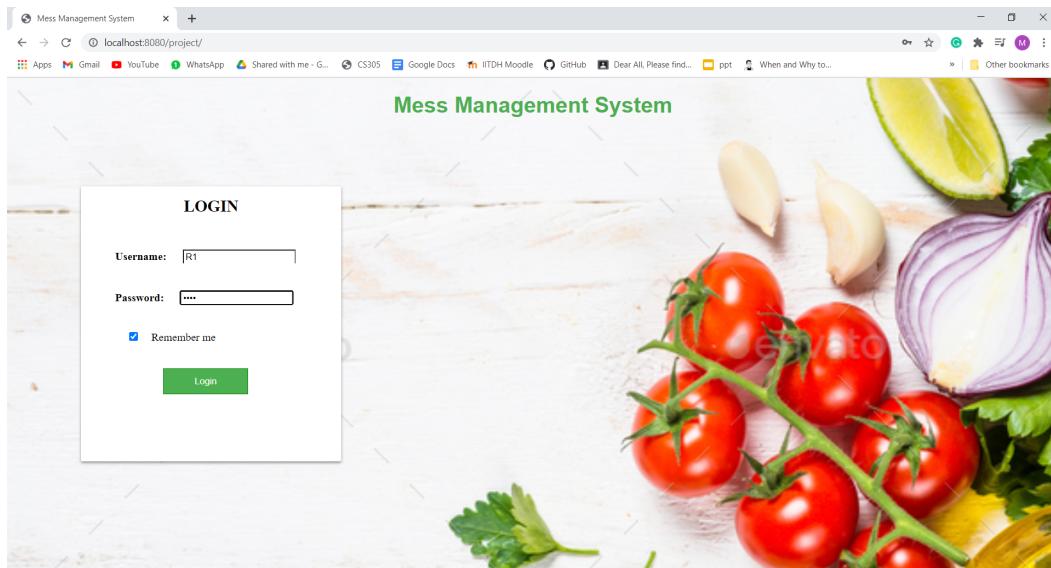
Added.jsp	and it also adds the new admin to the login table where the password is given by the admin(he has a option to change password)		values('A1','cake@gmail.com','Chandra Mohan'); Login: insert into login values('R1','raju');
netsalarystaffmembers.jsp	Displays the net salary given to each staff member	Data from staff_att, paid tables.	Staff_att: insert into staff_att values('S1','2014-01-01','yes','yes','yes','yes',4); Paid: insert into paid values('S1','2014-02-10',1000);
menuUpdate.jsp menupServlet Updated.jsp	Updates the menu table	Data from menu table.	Menu: insert into menu values(0,'poha,banana',20,'rice,dal,curd',30,'maggie',10,'rice,cabbage fry,curd',30);
Change.jsp ChangeServlet Updated.java	Updates the password in the login table for a given user	Data from login table.	Login: insert into login values('R1','raju');

4. CONCLUSION:

This small database management project can help in managing a mess system. It gives all important facilities to residents(who are consuming meals), staff(members who are working at mess and consume meals as well) and admin. Objective of the system is to provide a user friendly daily attendance system that is easy to manage, maintain and query and this has been achieved here.In this way we are reducing the work of mess managers(here they are admins) who still maintain all the logs in registers and files. This is indeed a benefit as all complex calculations are done within seconds and bills are generated on the single click of a button.

Screenshots:

Login Page



Resident pages

A screenshot of a web browser window titled "Mess Management System". The main content area features a background image of fresh vegetables like tomatoes, onions, and garlic. At the top left, a sidebar displays the message "Logged in as Resident". Below the sidebar is a vertical navigation menu with the following options: PERSONAL DETAILS (highlighted in green), MENU, REPORT, PAYMENT DETAILS, COMPLAINTS, and COMPLAINTS STATUS.

Mess Management System

localhost:8080/project/pd_residentServlet?

PERSONAL DETAILS

id	R1
mobile no.	9451676215
email_id	god@gmail.com
acc_no	39749540
room no.	2
Full name	prasanna

MENU

REPORT

PAYMENT DETAILS

COMPLAINTS

COMPLAINTS STATUS

Type here to search

23:37 ENG 01-12-2020



Mess Management System

localhost:8080/project/AttServlet?

PERSONAL DETAILS

MENU

REPORT

PAYMENT DETAILS

COMPLAINTS

COMPLAINTS STATUS

Number of days resident visited mess in this month are: 31
Number of days resident did not visit mess:0

ID	Date	Number of meals skipped
R1	2014-01-01	1
R1	2014-01-02	0
R1	2014-01-03	1
R1	2014-01-04	1
R1	2014-01-05	2
R1	2014-01-06	3
R1	2014-01-07	3
R1	2014-01-08	2
R1	2014-01-09	3
R1	2014-01-10	2
R1	2014-01-11	1
R1	2014-01-12	0
R1	2014-01-13	1
R1	2014-01-14	2
R1	2014-01-15	3
R1	2014-01-16	2

Mess Management System

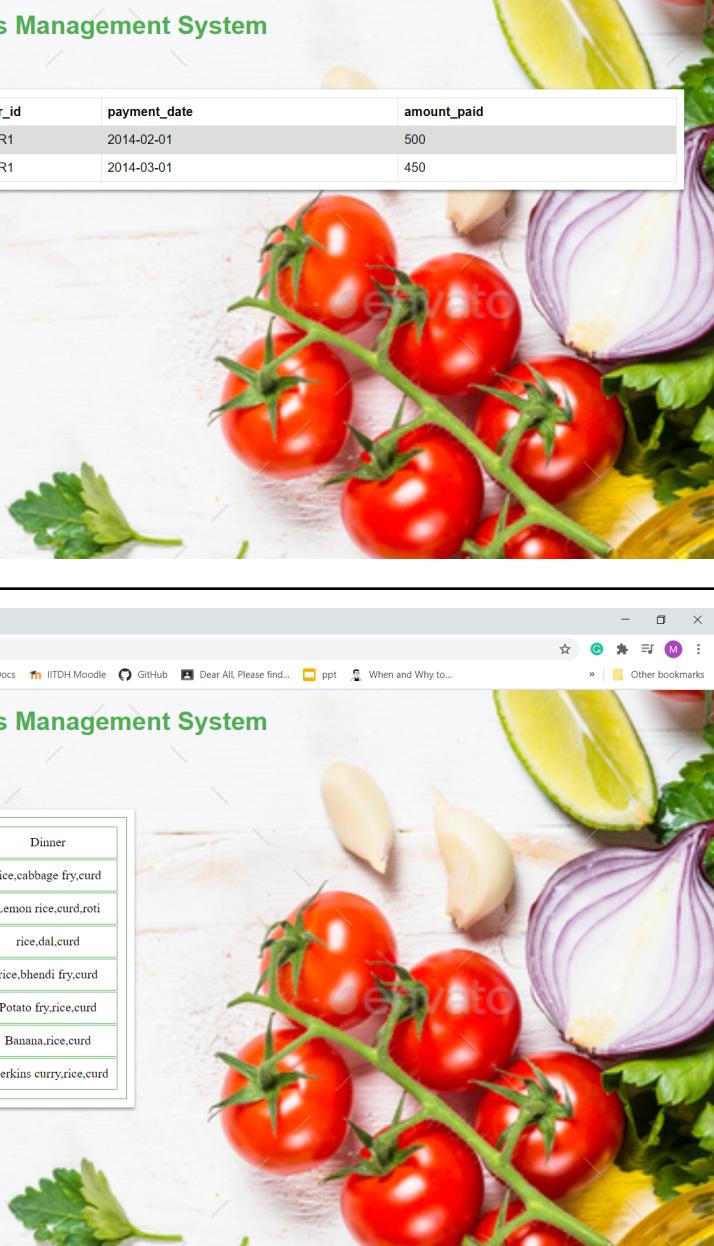
- [PERSONAL DETAILS](#)
- [MENU](#)
- [REPORT](#)
- [PAYMENT DETAILS](#)
- [COMPLAINTS](#)
- [COMPLAINTS STATUS](#)

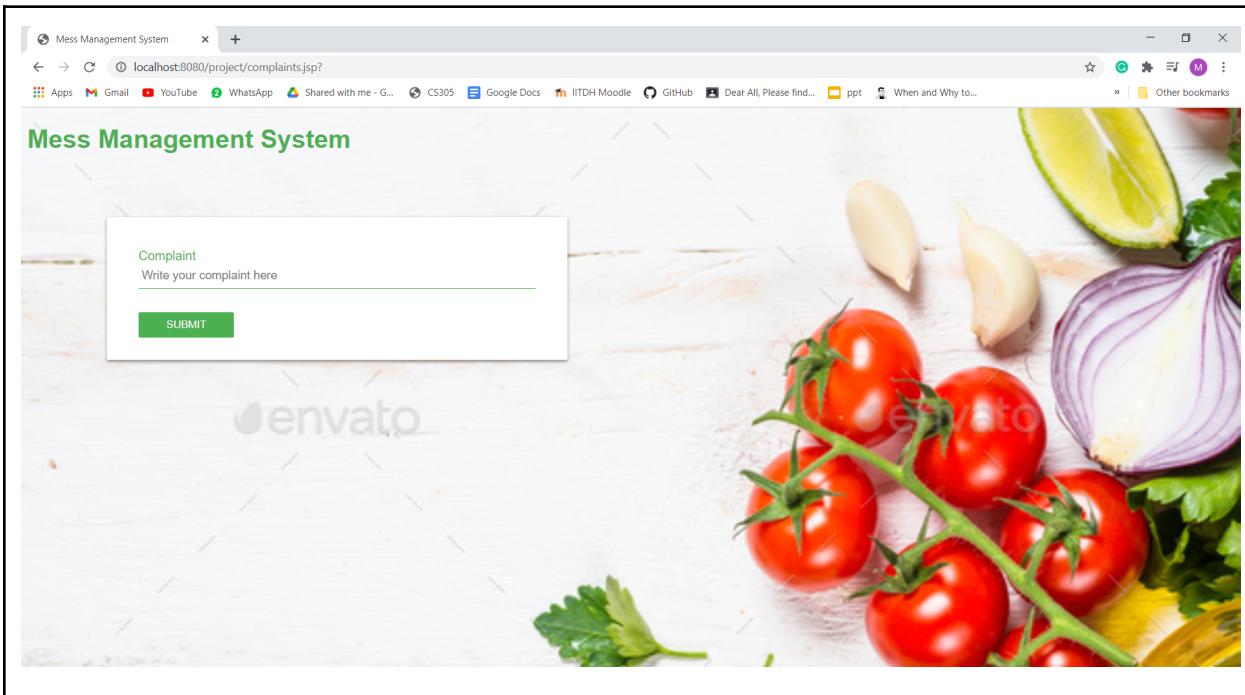
payment_no	r_id	payment_date	amount_paid
1	R1	2014-02-01	500
2	R1	2014-03-01	450

Menu

[Mess menu:](#)

Day	Breakfast	Lunch	Snacks	Dinner
Sunday	poha,banana	rice,dal,curd	maggi	rice,cabbage fry,curd
Monday	roti,curry	rice,bhendi fry,curd	vadapav	Lemon rice,curd,roti
Tuesday	idli,chutney	Banana,rice,curd	Watermelon	rice,dal,curd
Wednesday	dosa,chutney	rice,cabbage fry,curd	Banana,	rice,bhendi fry,curd
Thursday	vada,chutney	gherkins curry,rice,curd	Mixture	Potato fry,rice,curd
Friday	savai upma,mixture	Potato fry,rice,curd	maggi	Banana,rice,curd
Saturday	puri,potato curry	Lemon rice,curd,roti	pavbaji	gherkins curry,rice,curd





Staff members pages

Staff details:

Mess Management System

localhost:8080/project/pd_staffServlet?

PERSONAL DETAILS

ID	S1
mobile no.	8234579292
email_id	keke@gmail.com
acc_no	265798423
salary	9500
fullname	suresh

MENU REPORT NET SALARY PAYMENT COMPLAINTS COMPLAINT STATUS

Type here to search

23:50 01-12-2020

Mess Management System

localhost:8080/project/StaffRpServlet?

PERSONAL DETAILS

r_id	date	Num. of meals eaten
S1	2014-01-20	4
S1	2014-01-21	2
S1	2014-01-19	4

Number of meals eaten in this month are: 10

MENU PAYMENT DETAILS COMPLAINTS COMPLAINT STATUS

Type here to search

23:50 01-12-2020

Mess Management System

PERSONAL DETAILS

MENU

REPORT

PAYMENT DETAILS

COMPLAINTS

COMPLAINTS STATUS

r_id	Net_Salary
S1	9300



Admin Pages

LOGGED IN AS ADMIN:

UPDATE ATTENDANCE FOR RESIDENTS

UPDATE ATTENDANCE FOR STAFFS

NET MESS BILL

HANDLE REFUNDS

VIEW TO RESOLVE THE COMPLAINTS

MARK A COMPLAINT AS RESOLVED

ADD A RESIDENT

ADD A STAFF MEMBER

ADD AN ADMIN

NET SALARY OF STAFFMEMBERS

UPDATE MENU

CHANGE PASSWORD



Update the attendance!!!

Resident ID	R3
Date	2014-02-01
Breakfast	no
Lunch	yes
Snacks	yes
Dinner	no
Meals Skipped today	2 <input type="button" value="x"/>



Update the attendance!!!

Staff ID	S7
Date	2014-02-01
Breakfast	yes
Lunch	no
Snacks	no
Dinner	no
Meals Had today	3 <input type="button" value="x"/>



Give the id of the user whose complaint has been solved to mark it as RESOLVED!!

USER ID:



Please fill the below to add the resident!!

Resident ID	<input type="text"/>
Mobile Number	<input type="text"/>
Email ID	<input type="text"/>
Account Number	<input type="text"/>
Room Number	<input type="text"/>
Full Name	<input type="text"/>
Password	<input type="text"/>



Please fill the below to add the staff!!

Staff ID	<input type="text"/>
Mobile Number	<input type="text"/>
Email ID	<input type="text"/>
Account Number	<input type="text"/>
Salary	<input type="text"/>
Full Name	<input type="text"/>
Password	<input type="text"/>



Please fill the below to add the admin!!

Admin ID	<input type="text"/>
Email ID	<input type="text"/>
Full Name	<input type="text"/>
<input type="button" value="Submit"/>	



Net salary of staff members

Staff ID	Net Salary
S1	9800
S2	9840
S3	9880
S4	9920
S5	9900
S6	9840
S7	9980
S8	9960
S9	9940

Mess Bill:

Monthly Mess Bill

Net Mess Bill = 28220

Net Salary Paid = 27540

Net Payment paid by Residents = 55760



Update Menu

Day	<input type="text"/>
Breakfast	<input type="text"/>
Lunch	<input type="text"/>
Snacks	<input type="text"/>
Dinner	<input type="text"/>
Cost Per meal	<input type="text"/>

