DEPARTMENT GRIEVIANCE MANAGEMENT

Project Report Submitted

To

Gujarat University

In partial fulfilment of the requirements for

the award to the Degree of

5 YEAR INTEGRATED MASTER OF SCIENCE (COMPUTER SCIENCE)

SEMESTER –VI

GUIDED BY: SUBMITTED BY:

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DEPARTMENT OF COMPUTER SCIENCE
GUJARAT UNIVERSITY, AHMEDABAD
YEAR: 2022-23

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PROJECT PROFILE

Title	Description
Project Title	Department Grievance Management
Aim of Project	Addressing concerns and complaints regarding various aspects of our department's facilities and services
Project duration	6months
Team size	1 Members
Tools used	Visual Studio code,Github
Technologies used	HTML,CSS,Javascript,Ajax
Software and hardware environment requirement to use for an application	Any modern web browser is compatible with HTML,CSS and JavaScript
Guide	Dr Hiren Joshi

Project Description

- The Department Grievance Management System is designed to serve as a comprehensive platform for addressing concerns and complaints regarding the various aspects of our department's facilities and services. With a focus on creating a supportive and conducive environment, this system aims to streamline the grievance submission and resolution process. By providing a centralized hub for managing complaints, we seek to enhance communication, accountability, and overall satisfaction within the academic community.

- With the user-friendly interface, students can easily submit complaints regarding various issues they encounter within the department. Whether it's a malfunctioning computer, a cleanliness issue in the restroom, or any other concern impacting their experience, our platform provides a straightforward mechanism for voicing these grievances.

- The primary objectives of the Department Grievance Management System are to create an efficient process that reduces the time and effort required to submit and resolve grievances, ensuring that issues are addressed promptly and effectively. By making the status and resolution of complaints visible to all stakeholders, the system fosters transparency, trust, and accountability

❖ Functional Requirements of the System

1)User Authentication and Authorization

- Users can login or Register as per the requirements and they can manage their profile .
- User can update or edit their profile information such as their email.
- There are different Roles based on specific permissions such as Admin, Faculty and Student.

2)Grievance Submission

- Students can submit the grievances based on their issues and category of grievance.
- The Grievance submission form consists of the complaint ID ,Description and any relevant attachments.

3)Grievance Tracking

- Tracking of the complaints/grievances as students can see the status of the grievance.

4)Categoraization of the Grievance

- Different Categories of the complaints are provided .
- System allows user to choose the categories as per the nature of the grievance(Laboratory ,Library,Infrastructure etc)

5)Reporting

Report of the grievances which are in the system .

6)Searching and Filters

Using the Search ability for searching the complaints .

Users must be able to search and filter complaints based on various parameters (e.g., category, status, date).

❖ Non-Functional Requirements of the System

1)Usability

- User friendly interface providing smoother interaction with the students as well .

2)Performance

- The system will respond quickly to user inputs and queries.

3)Compatibility

- The system is compatible with various web browsers .

4)Maintainability

- To be well coded and documented so that it will be better to maintain.

PROJECT DESCRIPTION

Requirements of the Users

1. Student

- Generates Grievance
- Uploads media file pdf of size maximum limit only
- View Status
- View Grievance

2. Faculty

- View Grievance
- Update Status
- Handling the grievances according to the category.
- Delete Grievance
- Generate Reports

3.   <u>Admin</u>

- View Grievance

- Manages Users

- Manages Grievance

- Validate the grievance status

- Can Assign the faculty to the particular category or grievance

- Generates the report on the basis of the grievance received
  - such as number of grievances filed , categories of grievance and status of grievance

Languages & Tools

❖ <u>Frontend</u>

- **HTML:** Used to structure the content on the web pages.

- **CSS:** Employed for styling and designing the user interface to ensure it is visually appealing and consistent. Using this to provide proper representable interface and smooth interaction as well as for better aesthetics to style and design landing pages for users to easily interact.

- **JavaScript:** Utilized to create interactive elements, enhance user experience, and enable dynamic content updates on the web pages. Providing minimal features to help provide a solid foundation for the system.

❖ <u>Backend</u>

- **SQL:** Utilized to manage and query the database, ensuring efficient storage, retrieval, and manipulation of complaint data. SQL is used to handle all database operations, including storing complaint details, tracking their status, and generating reports. Sql queries helping in fetching the data required each time and also helping to manipulate the data at the same time directly from frontend rather than changing it in table from phpmyAdmin.

SOFTWARE

DESIGN

❖ <u>Use Case</u>

o Admin

Department Grievance Management System

- Registration
- Login
- Manage Users
- View Grievances
- Manages Grievances
- Generates report
- View Status

Admin

o **Faculty**

o **Student**

❖ CLASS DIAGRAM

Faculty

#faculty_id:int(5)
-firstname:varchar(30)
-lastname:varchar(30)
-password:varchar(64)
-email:varchar(150)
-user_id :int(5)
+AddFaculty()
+UpdateFaculty()
+DeleteFaculty()
+ViewFaculty()

Student

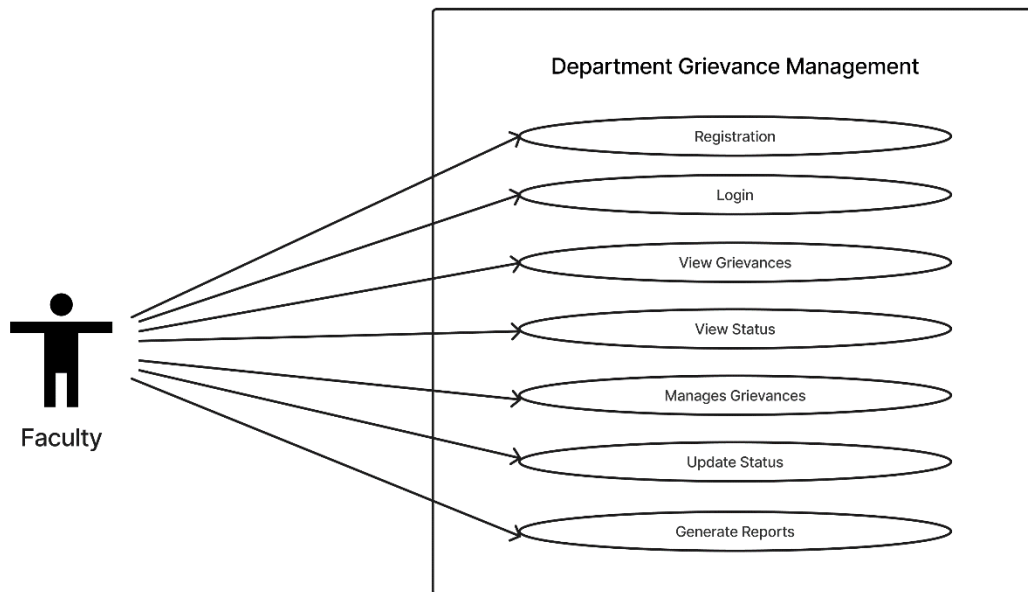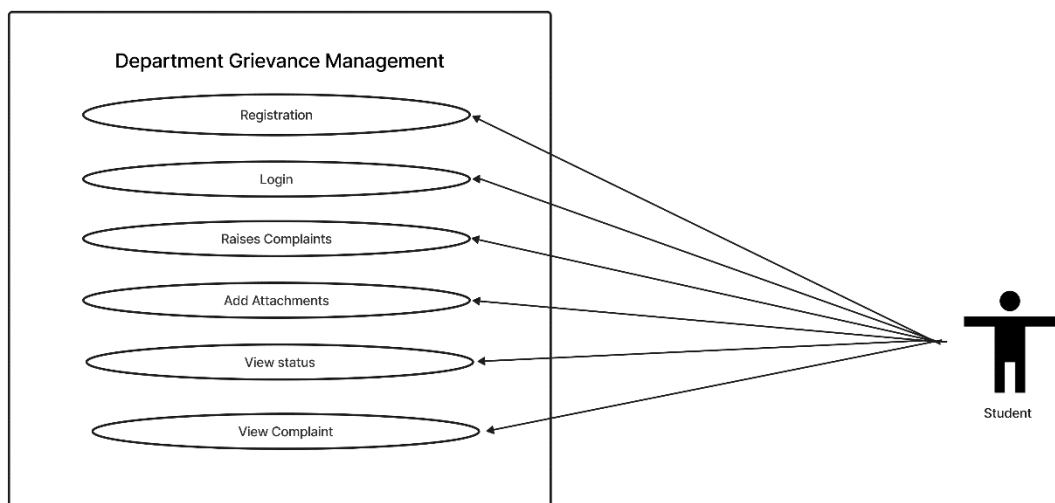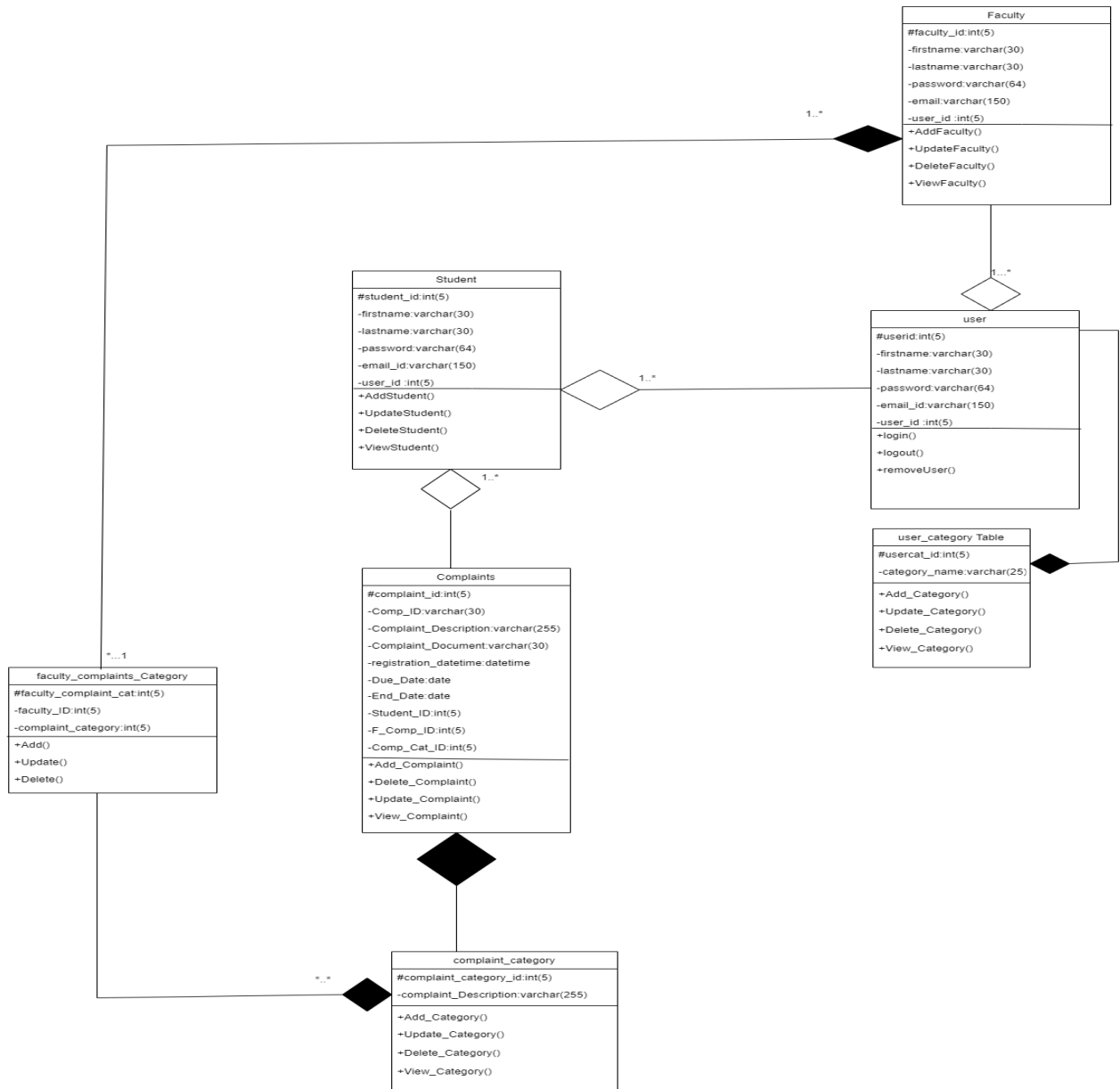| |
|---|
| #student_id:int(5) |
| -firstname:varchar(30) |
| -lastname:varchar(30) |
| -password:varchar(64) |
| -email_id:varchar(150) |
| -user_id :int(5) |
| +AddStudent() |
| +UpdateStudent() |
| +DeleteStudent() |
| +ViewStudent() |

user

#userid:int(5)
-firstname:varchar(30)
-lastname:varchar(30)
-password:varchar(64)
-email_id:varchar(150)
-user_id :int(5)
+login()
+logout()
+removeUser()

user_category Table

#usercat_id:int(5)
-category_name:varchar(25)
+Add_Category()
+Update_Category()
+Delete_Category()
+View_Category()

faculty_complaints_Category

#faculty_complaint_cat:int(5)
-faculty_ID:int(5)
-complaint_category:int(5)
+Add()
+Update()
+Delete()

Complaints

#complaint_id:int(5)
-Comp_ID:varchar(30)
-Complaint_Description:varchar(255)
-Complaint_Document:varchar(30)
-registration_datetime:datetime
-Due_Date:date
-End_Date:date
-Student_ID:int(5)
-F_Comp_ID:int(5)
-Comp_Cat_ID:int(5)
+Add_Complaint()
+Delete_Complaint()
+Update_Complaint()
+View_Complaint()

complaint_category

#complaint_category_id:int(5)
-complaint_Description:varchar(255)
+Add_Category()
+Update_Category()
+Delete_Category()
+View_Category()

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❖ **Functionality of the System**

Users

Grievance Registered

Grievance Accepted

Grievance Rejected

Assigned to Action Talking Authority

Review the Action Taken Report

Action Taken Report

Follow up Close

Resolved

Discarded

Reopen

Follow up open

Forward to another ATA
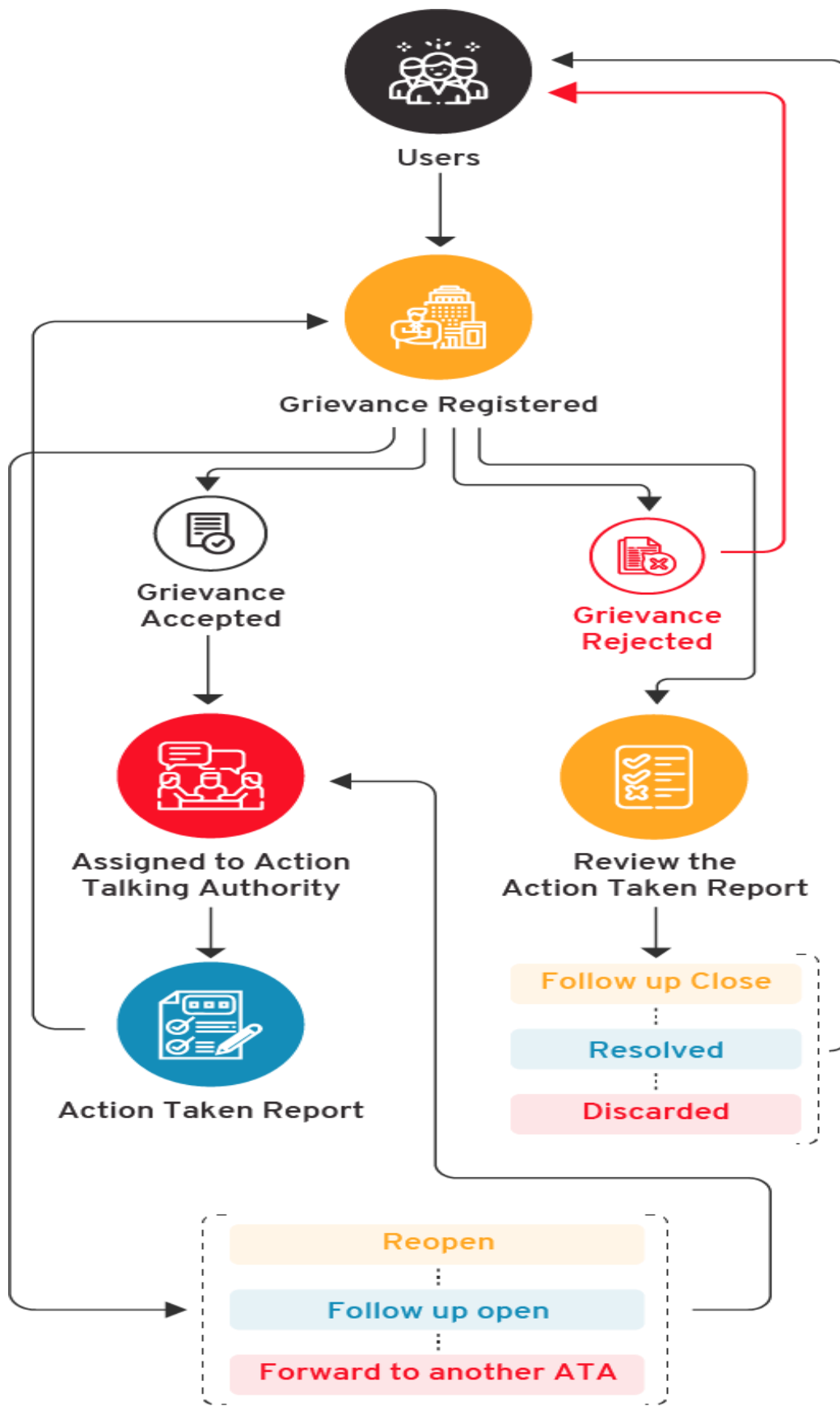
DATA DICTIONARY

Data Dictionary

❖ User Table

Serial no	Field name	Type	Size	Link to	Constraints	Sample data
1	userid	INT	5		Primary Key	12
2	firstname	VARCHAR	30			Kathan
3	lastname	VARCHAR	30			Sharma
4	password	VARCHAR	255			
5	email_id	VARCHAR	50		Unique key	kathan@email.com
6	usercat_id	INT	5	usercategory ->usercat_id	Foreign key	2

❖ User Category Table

Serial no	Field name	Type	Size	Link to	Constraints	Example
1	Usercat_id	INT	5		Primary Key	1
2	Category_name	INT	25			Faculty

Complaints Table

Sr no	Field name	Type	Size	Link to	Constraints	Example
1	complaint_id	INT	5		Primary Key	10
2	Comp_ID	VARCHAR	11			E-265533760
3	Complaint_ Description	VARCHAR	255			System 116 in lab 3 not working.
4	Complaint_ Document	VARCHAR	100			./uploads/complaint.pdf
5	Registration _time	DATETIME				2024-05-04 21:02:57
6	Status	ENUM				Pending,Processing,Resolved
7	Due_Date	DATE				2024-05-04
8	End_Date	DATE				2024-05-19
9	Student_ID	INT	5	Student->student_id	Foreign Key	1
10	F_Comp_ID	INT	5	Faculty_complaints _cat->faculty_complaint_ cat	Foreign Key	3

11	Complaint_Cat_ID	INT	5	Complaint_category->complaint_category_id	Foreign Key	10

❖ <u>**Complaint_category Table**</u>

Serial no	Field name	Type	Size	Link to	Constraints	Example
1	Complaint_category_id	INT	5		Primary Key	11
2	Category_description	VARCHAR	30			Cleaning and management

❖ <u>**Student Table**</u>

Serial no	Field name	Type	Size	Link to	Constraints	Example
1	student_id	INT	5		Primary Key	11
2	firstname	VARCHAR	30			Janvi
3	lastname	VARCHAR	30			Chauhan
4	password	VARCHAR	64			
5	email	VARCHAR	150			janvi@gmai.com
6	user_id	INT	5	user->userid	Foreign Key	43

❖ **Faculty Table**

Serial no	Field name	Type	Size	Link to	Constraints	Example
1	faculty_id	INT	5		Primary Key	14
2	firstname	VARCHAR	30			Hiren
3	lastname	VARCHAR	30			Joshi
4	password	VARCHAR	64			
5	email	VARCHAR	150			hiren@gmail.com
6	user_id	INT	5	user->user_id	Foreign Key	17

❖ Faculty_complaint category Table

Serial no	Field name	Type	Size	Link to	Constraints	Example
1	faculty_ complaint_cat	INT	5		Primary key	1
2	Faculty_ID	INT	5	faculty->faculty_id		8
3	Complaint_ Category_ID	INT	5	Complaint_catego ry_ID		1

SCREENSHOTS

❖ Registration Form

❖ Login Form

❖ Home Page

❖   Submit Grievance Form

Complaint Submission Form

Complaint ID:

Complaint Category

Select Complaint Category ▾

Complaint Description:

Complaint Document (PDF):

[Choose File] No file chosen

[Submit Complaint]

Complaint Submission Form

Complaint ID:

C-270624111523199

Complaint Category

Cleaning and Management ▾

Complaint Description:

This is the issue regarding the cleaning and management of the class

Complaint Document (PDF):

[Choose File] complaint.pdf

[Submit Complaint]

❖　　Submitting Grievance Successfully

Complaint Details

Complaint ID: C-270624145554227

Status: Processing

Complaint Description: cleaning

Registration Date: 2024-06-27 11:26:41

Complaint ID: E-270624135822205

Status: Pending

Complaint Description: exam

Registration Date: 2024-06-27 10:28:32

Complaint ID: C-270624111523199

Status: Pending

Complaint Description: This is the issue regarding the cleaning and management of the class
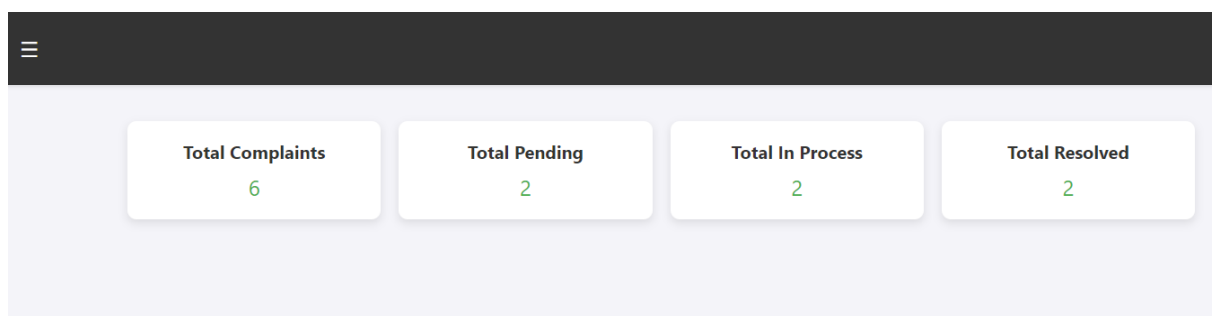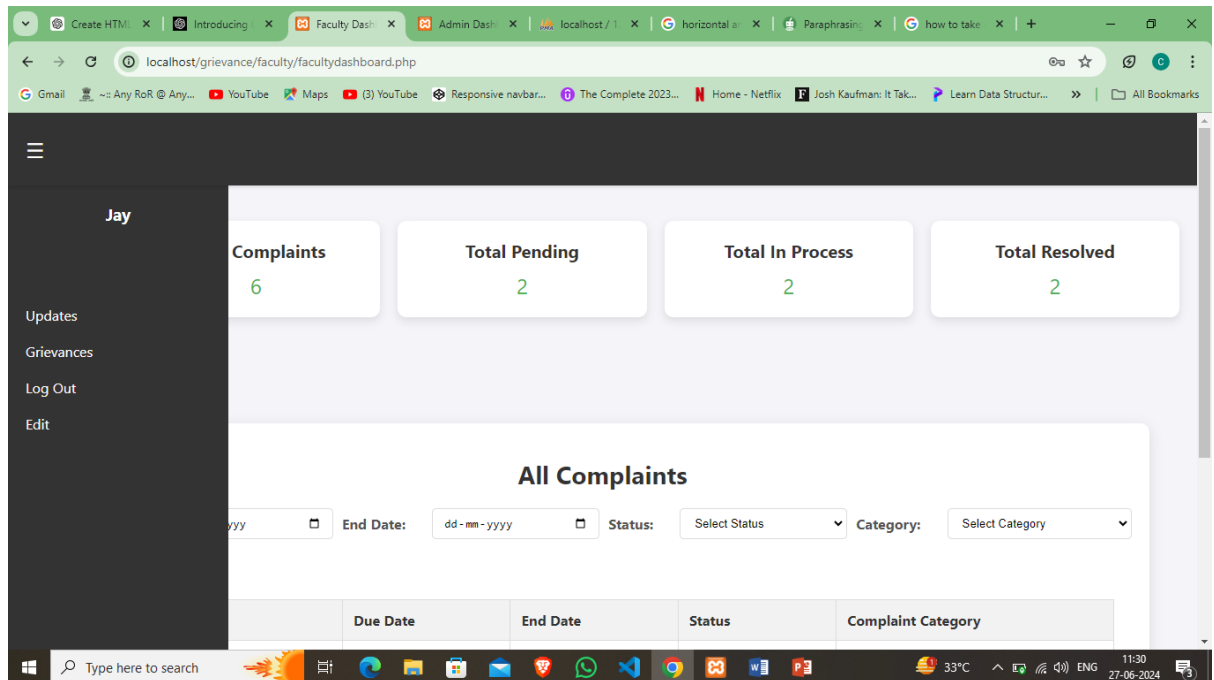
❖ Edit Profile

Home

Log Out

Change Profile

Firstname:

tirth

Lastname:

mehta

Email

tirthm@gmail.com

Update

❖   Faculty Dashboard

- The list of complaints of the category assigned to the faculty and their status.

❖ Filter Reports

All Complaints

| Due Date: | dd-mm-yyyy | End Date: | dd-mm-yyyy | Status: | Select Status | Category: | Select Category |

Filter

Complaint ID	Due Date	End Date	Status	Complaint Category
C-060524110353894	2024-05-06	2024-05-21	Pending	7
C-080524215009468	2024-05-08	2024-05-23	Resolved	7
C-240624182824409	2024-06-24	2024-07-09	Processing	7
C-260624155344270	2024-06-26	2024-07-11	Processing	7
C-260624163555757	2024-06-26	2024-07-11	Resolved	7
C-270624111523199	2024-06-27	2024-07-12	Pending	7

All Complaints

| Due Date: | dd-mm-yyyy | End Date: | dd-mm-yyyy | Status: | Pending | Category: | Cleaning and Management |

Filter

Complaint ID	Due Date	End Date	Status	Complaint Category
C-060524110353894	2024-05-06	2024-05-21	Pending	7
C-270624111523199	2024-06-27	2024-07-12	Pending	7

❖ Grievances Assigned list

Complaint ID: C-270624111523199

Due Date: 2024-06-27

End Date: 2024-07-12

Status: [Pending ▾]

Complaint Description: This is the issue regarding the cleaning and management of the class

Student Name: tirth mehta

[View Document]

[Back]   [Delete]

Complaint ID: C-270624114942036

Due Date: 2024-06-27

End Date: 2024-07-12

Status: Pending ▾

Pending
Processing
Complai **n:** cleaning
Resolved

Student Name: tirth mehta

View Document

Back   Delete

Complaint ID: C-270624114942036

Due Date: 2024-06-27

End Date: 2024-07-12

Status: [Processing ▾]

Complaint Description: cleaning

Student Name: tirth mehta

[View Document]

[Back]   [Delete]

Complaint Details

Complaint ID: C-270624114942036

Status: Processing

Complaint Description: cleaning

Registration Date: 2024-06-27 08:19:50

[Delete Complaint]

Change of the status from "Pending " to "Processing in the faculty dashboard and we can see the change of the status in the Student side .

❖ Complaint Document

❖ Admin Dashboard

Department Grievance Admin Dashboard

Number of Users	Number of Faculty	Total Complaints
28	7	18

Resolved Complaints	Processing Complaints	Pending Complaints
4	8	6

❖ Users

User Data

Aagam Jain	aagam@gmail.com	Student	Delete
janvi chauhan	janvi.chuahan	Student	Delete
Ankit Yadav	ankit@gmail.com	Student	Delete
Ansh Yadav	ansh@gmail.com	Student	Delete
Aryan Hirpara	aryan@gmail.com	Student	Delete

< Prev 1 2 3 4 5 6 Next >

❖ Faculty Users

Faculty

Bhumika Shah	bhumika@gmail.com	Delete
Jinali Shah	jinali@gmail.com	Delete
Jyotsana Mam	jyotsana@gmail.com	Delete
Mehul Shah	mehul@gmail.com	Delete
Hardik Joshi	hardik@gmail.com	Delete

< Prev 1 2 Next >

❖ Student Users

Students

Aagam Jain	aagam@gmail.com	Delete
Ankit Yadav	ankit@gmail.com	Delete
Ansh Yadav	ansh@gmail.com	Delete
Aryan Hirpara	aryan@gmail.com	Delete
Riya Patel	riya@gmail.com	Delete

Next

< Prev 1 2 3 Next >

❖ Grievances

User Complaints

C-270624114525675	2024-06-27	2024-07-12	Pending	Open	Delete
C-270624111523199	2024-06-27	2024-07-12	Pending	Open	Delete
C-260624163555757	2024-06-26	2024-07-11	Resolved	Open	Delete
E-260624162852952	2024-06-26	2024-07-11	Processing	Open	Delete
C-260624155344270	2024-06-26	2024-07-11	Processing	Open	Delete

< Prev | 1 | 2 | 3 | 4 | 5 | Next >

❖ Filter Reports

All Complaints

Due Date:	dd-mm-yyyy	**End Date:**	dd-mm-yyyy	**Status:** Select Status	**Category:** Select Category	Filter

Complaint ID	Due Date	End Date	Status	Complaint Category
E-050524233751409	2024-05-05	2024-05-20	Pending	Exam Cell
L-060524001635525	2024-05-05	2024-05-20	Processing	Laboratory
AB-060524062903858	2024-05-06	2024-05-21	Pending	Accounts and Billing
S-060524101048245	2024-05-06	2024-05-21	Pending	Safety and Security
Li-060524105033115	2024-05-06	2024-05-21	Pending	Library
S-060524105558602	2024-05-06	2024-05-21	Processing	Safety and Security
C-060524110353894	2024-05-06	2024-05-21	Pending	Cleaning and Management
T-060524114244380	2024-05-06	2024-05-21	Processing	Technical issues

Conclusion

- The system is beneficial for departmental level and interaction of the users.

- With its ability to track grievances and manage them accordingly and to improve the overall academic experience by providing a streamlined, efficient, and transparent mechanism for handling complaints.

- This platform not only improves the efficiency of the grievance handling process but also fosters a culture of accountability and transparency within the department. Additionally, the ability to filter and generate detailed reports from the data collected enables the department to identify trends, make data-driven decisions, and continually improve the quality of its facilities and services.

- Overall, the Department Grievance Management System is a significant step towards creating a more supportive, responsive, and conducive environment for all members of the academic community. By addressing and resolving grievances promptly and effectively, the system contributes to a better, more harmonious academic environment.

Future Scope

• For the future scope. I'd like to provide a notification procedure through which stakeholders can get changes. For example, if a faculty member receives a grievance based on the category assigned, they may receive a note in the mail. Another type of information to be presented on the website is that they have unread or pending grievances, with a track provided to the faculty.

• Improved administrative functionality and dynamic handling. Also, consider the overall website.

• Admin should be allowed to assign grievances to faculty members rather than the default category.

• Grievance period: 15 days. If the issue is not fixed within that time frame, the status will be disabled, and the student will be notified.

<u>Bibliography</u>

- https://epfigms.gov.in/grievance/grievancemaster
- https://www.w3schools.com/
- https://pgportal.gov.in/