



UML Complaint System

Project Report
Internet & Web System
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CHAPTER-1

Abstract:

We are planning to create a Complaint management system where university student, employees and faculty can register their complaints by creating new account or signing into existing account. After filing a complaint, admin will receive a notification with the complaint ID. The purpose of hiding complaint details is to make secure environment around university and make user comfortable to talk about incidences happening around them by keeping their identity secret.

If the user is not satisfied with the department's answer or notices the same scenario reoccurring, he or she may reactivate the initial complaint, which will be forwarded to a higher-ranking member of the hierarchy in the corresponding department.

Problem Statement:

For example, “some PC are not working in Library on first floor” this type of complained C posted by one student, now this C will be visible to admin and is send to let say IT dept. Now its’s responsibility of IT department to check and repair the PC in library. After that IT department change the complaint status as resolve.

CHAPTER-2: WORK

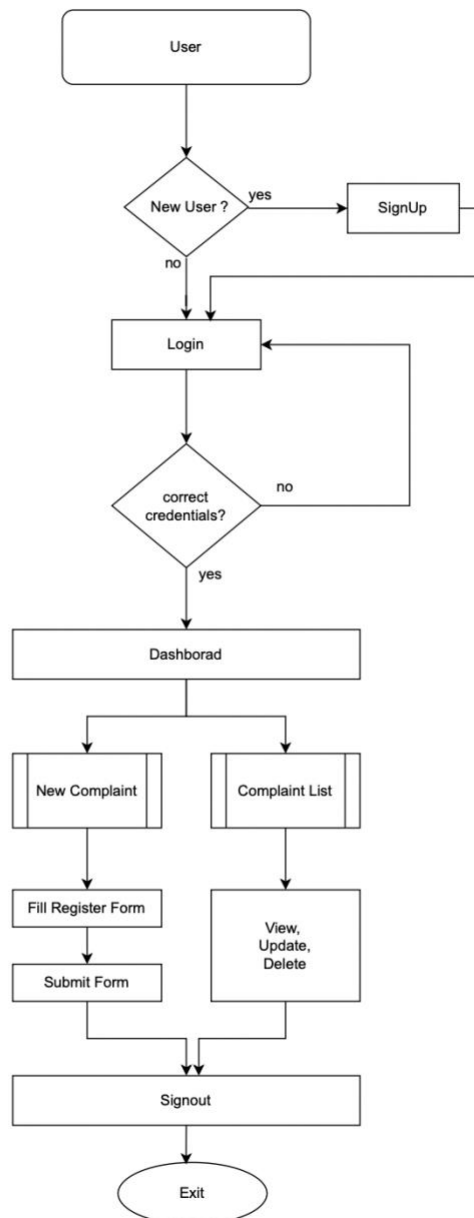
2.1 Project work

We made UML Complaint system in which we have total three modules User, Admin and Department. In user Module user can Login with credentials like username and password if user does not have any account, then user can SignUp and set username and password for account. If username and password is right, then page redirect to user dashboard. User can register new complaint with registration details like (1)it is complain or query (2) register date(3) priority (4) Details or justification (5) Department name. Moreover, User can view, Update, Delete Complaint from Complaintlist webpage. In Admin module, admin login with credentials and go to dashboard. Admin can not signup. Admin manages Departments and Complaints. Its admin responsibilities to create(add), delete or update departments. If admin feels some users try to register wrong complaints then admin have rights to block that complaints. When User register for complaint for department, that department get that complaints. Its department role to resolve that complaint. After solving complaints department admin changes the status of complaints like solved. User also can give feedback.

2.2 Workflow:

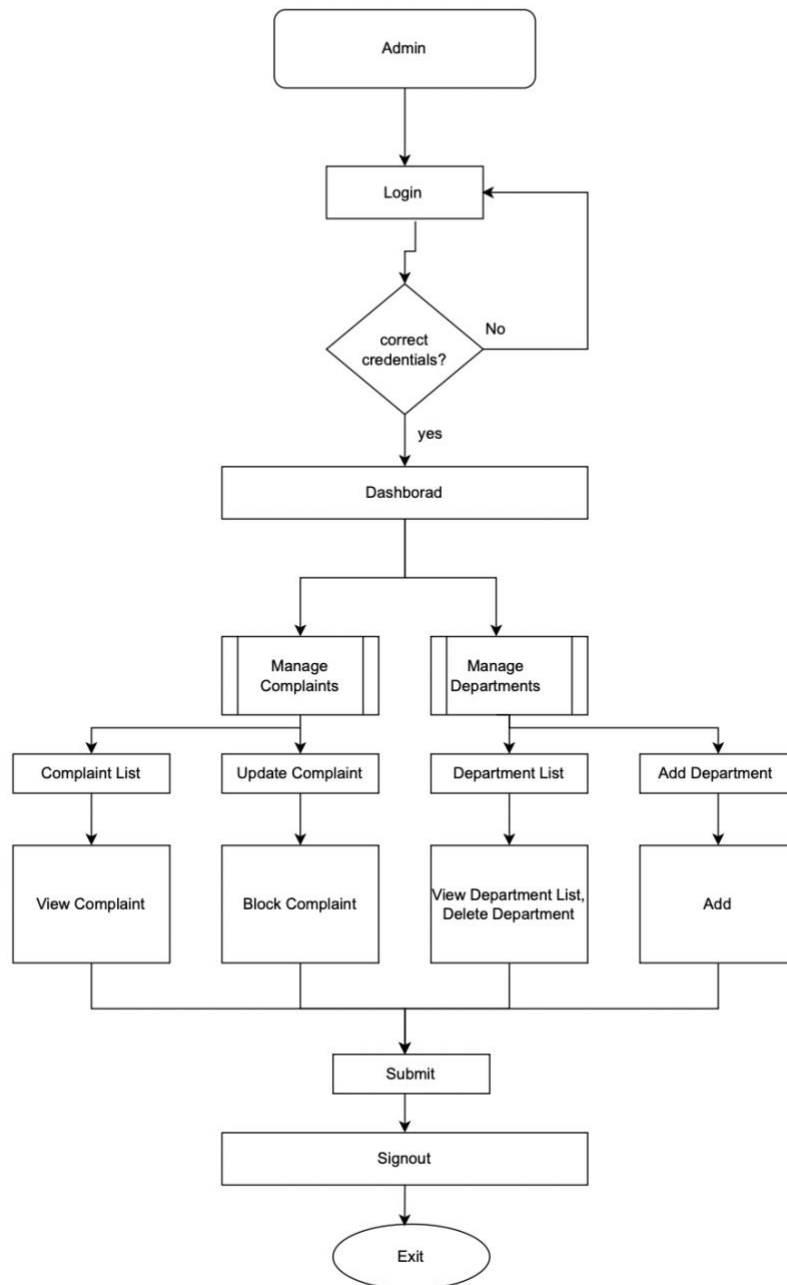
User:

User Diagram



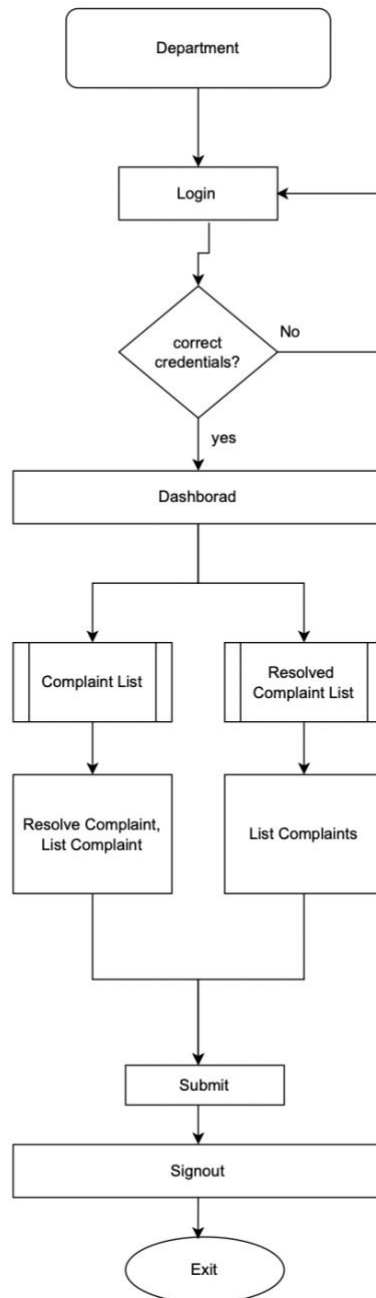
Admin:

Admin Diagram



Department:

Department Diagram



2.3 Division of labor among team members

My Work: Basically, we have mainly three module User, Admin, and Department. In First week, I have started to develop front end with HTML and CSS technology. I have developed Log IN webpage, Dashboard webpage and Contact Us webpage for User, Admin and Department Module. From next week, I have started to develop backend portion with using java and Spring boot. I have used MVC (Model, View, Controller) architecture for my project. First, I have launched Maven project and made a folder for Application class file, Controller, Model, repository, security, service, resources, CSS file, JSP file and pom.xml file. After that, Created an API for LogIN and SignUP page, check the API with using Controller, Service, Repository and Entity. If User have account, then directly redirect to Dashboard but if user do not have account, then user can fill register form on SignUP page. At logIn time credentials will check with data from database. For Admin and Department module there is only LogIn page there is no SignUp page. Entity's data pass through repository, service, controller then user can view it. I have developed user module so user can register Complaint, view ComplaintList, Update and delete complaint with appropriate API. Every register user data will be stored in database. Also created a Session For all module so when user logged in portal session will start and when user logged out session will terminate. In Database data is always store, delete, and manipulate by calling method in spring do not need to call or write query. Then I started Admin and Department Module LogIn API with credentials. Then made a Controller for User, Department, Complaint and made a class and repository for service and repository. In Admin module, admin can add, delete, view department as well as admin can manage complaints like view and block complaints. Moreover, when any user register complaint for specific department for example IT dept. then IT department get Complaint that Complaint and they can resolve it. After resolve Complaint user get acknowledgment of their Complaint If user not satisfied with this then user can re-register complaint. For all this functionality, Controller is in the middle between view and model, data goes through Controller. In Whole Project all Backend work done by me. For backend I mostly face 400 bad request error, 404 Not found error, 500 Internal server error for solving them I used external source called stack overflow.

Shaili's Work: She developed majorly frontend part with using HTML, CSS and Javascript technology. There are three module for frontend like User, Admin, and Department. Also, She made a JSP file for each html pages.

2.4 Technologies:

Front-End: For front-end we have used HTML, CSS, and JavaScript.

Back-End: For back-end we have used JAVA, Spring bootstrap and for database we have used MySql.

In the backend, we are planning to develop the web app using either Java. Because Java is easier, more secure and sophisticated code if we want to update/add functionalities. Also, Java allows you to have quick web creation compared to Python. We can also make a use of PHP as it is Web development language whereas Python is more popular for Machine learning and Data science domains.

CHAPTER-3: INSTALLATION PROCESS

3.1 Build/Installation/launch Instruction

- Need Java SE 11
Check your system has java install or not by writing command java-version
- Use Eclipse IDE to run the Spring Boot
You need any IDE tool for spring.
- You need MySQL Database
- In Eclipse go to file → import → existing maven Project → next → Browse Folder path → Finish

We have pom.xml where all the dependencies are specified so all the required JAR files will be installed by the IDE.

- Check the application.properties file under src main → resources where you need to provide the userid and password of your MySQL workbench.
- This folder contains all controller file, Service file, Repository file, model file and all jsp files.

3.2 Use of Software

For Run Project:

- Finally, Go to com → example → demo, where there is DemoApplication.java. On the java file, run this application on Tomcat server

The web application will be started on 8080 ports, so just open the browser, and hit **localhost:8080**

- Admin does not have sign up option so here default User email and password for LogIn process.

ADMIN Module ([http: localhost/admin](http://localhost/admin))

- user email: - admin123@gmail.com
- password:- Admin@123
- Note (default username and password)

CHAPTER-4: Limitations

- In our portal user can not add external proof like pdf or image because we have some issue to fetch this data from database.
- When Any user Log In with right credentials, we try to give some msg like “User login” or “password incorrect” but some msg is pass like 0 or 1 but proper sentence will not pass so this functionality is partially work.
- We use date tag in JSP page the format is different but when this date option used in backend the format is different So I tried lots of method but it can't be solved.

CHAPTER-5: Future Work

- We are planning to add rating option for department from user. Like One user add Complaint for different department and one wants to give ratings to particular department for that we will implement this function.
- We will add option with google or Facebook account.
- We will add department admin and will make subbranch of department module.

CHAPTER-6: References

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<https://stackoverflow.com/questions/49002439/spring-boot-400-bad-request-error-even-when-parameter-is-present>

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