SOFTWARE REQUIREMENT SPECIFICATION

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DEPARTMENT	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
PROJECT ID	34
PROJECT NAME	***GRIEVANCES AND REDRESSAL PORTAL***
STACK	PYTHON STACK (AI)
SEAT NUMBER	154

1.INTRODUCTION:

1.1 PURPOSE OF THE DOCUMENT:

This SRS document defines what the Grievance Redressal Portal will do. It guides developers by outlining features (filing complaints, tracking progress) and what's excluded (external system integrations). It ensures everyone is on the same page and manages expectations for the portal's functionalities.

1.2 SCOPE OF THE PROJECT:

This project focuses on creating a web-based Grievance Redressal Portal for our institution. The portal aims to streamline communication by allowing students and faculty to submit grievances electronically through separate forms. These grievances will be reviewed anonymously by the management team, who can then manage the resolution process within the portal itself. Additionally, the system will automatically update the status of resolved grievances, and users can view updates on their own submissions.

2.SYSTEM OVERVIEW:

2.1 USERS:

The users have the ability to raise a grievance in the portal and get a solution to their grievance within 24 hours.

2.2 FEATURES:

2.2.1 LOGIN PAGE

Users can login using their respective organization's email address.

2.2.2 GRIEVANCE SUBMISSION:

Users can submit their grievance to the specific department in which they have an issue.

2.2.3 TYPES OF SUBMISSION:

There are three types of submissions a user can submit their grievances.

- PUBLIC
- PRIVATE

- ANONYMOUS

2.2.4 UPVOTE FEATURE:

Users can upvote the grievance if they have the same problem by clicking the upvote button.

2.2.5 STATUS OF THE GRIEVANCE:

The user who submitted their grievance can see the current status of their problem, i.e., initiated, viewed, and resolved.

2.2.6 ADMIN ACCESS:

Admin can view all the grievances and find the solution to the problem.

2.2.7 SOLUTION TO THE GRIEVANCE:

Users can view their solution in their portal through which they have created the grievance.

2.2.8 TIME-LIMIT TO ADMIN:

When a user creates a grievance and submitted in the portal, a timer (24 hours) will start in the admin side of the portal.

2.2.9 DASHBOARD:

Admin can view the number of grievances by category and also see the latest log of applications.

2.2.10 LOGOUT:

The user can log out of the portal easily by clicking the logout button.

3.FUNCTIONAL REQUIRMENTS:

3.1 TYPES OF USERS:

1. Students
2. Faculty
3. Non-teaching faculty
4. Admin (Management team)

3.2 LOGIN VALIDATION:

- Users can login using their Bitsathy mail ID.
- When the user logs in, the user's ID token will be sent to the server using HTTPS. Then, on the server, verify the integrity of the ID token and use the user information contained in the token to establish a session.
- Admin will have their own user ID and password, with which they will login to the portal as a reviewer.

3.3 GRIEVANCE SUBMISSION:

- Users can submit their grievance to the specific department in which they have their issue, e.g., ACADEMICS, DAY SKILL, TRANSPORTATION, etc.

3.4 TYPES OF SUBMISSIONS:

3.4.1 PUBLIC SUBMISSIONS:

- In public submissions, the user's name and registration number will be displayed along with their grievance.
- These public submissions can be viewed by anyone in this college and upvoted.

3.4.2 PRIVATE SUBMISSIONS:

- In private submission, the grievance will be viewed only by the management people (ADMIN).
- It's more like a one-to-one conversation. Not anyone in this college can view the grievance.

3.4.3 ANONYMOUS SUBMISSIONS:

- In anonymous submission, the user has the ability to post the grievance in an anonymous manner, i.e., the user's name and other details will not be visible to the admin. The admin can only see the grievance, not the user's name, etc.

3.5 UPVOTE FEATURE:

- The upvote feature can be accessed only in public submissions.
- There will be an up-arrow button at the end of the grievance submitted by the other users.

- Other users can upvote the grievance if they have the same problem by clicking the button.
- The grievance with the highest upvote will be pushed to the top, and the admin will view this grievance first.

3.6 STATUS OF THE GRIEVANCE:

- The users who submitted their grievance can see the current status of their problem, i.e., initiated, viewed, or resolved.
- When the user initially submits the grievance, its status will be initiated.
- When the admin views that particular grievance, it will be marked as viewed.
- When the grievance is resolved, it will be marked as resolved, and the grievance will be deleted after 24 hours.

3.7 SOLUTION TO THE GRIEVANCE:

- The solution to the grievance will be updated on the same portal.
- Users can view their solution in the portal through which they created the grievance.

3.8 TIME-LIMIT TO ADMIN:

- When a user creates a grievance and submits it to the portal, a timer (24 hours) will start on the admin side of the portal.
- This ensures that the users will have their solution within a day.

3.9 DASHBOARD:

- Admin can view the number of grievances by category and also see the latest log of applications.
- When an admin logs into the portal, a dashboard will appear first.
- The dashboard contains information like the total number of queries, the number of public submissions, the number of private submissions, the number of anonymous submissions, the total number of grievances resolved, etc.

4.NON-FUNCTIONAL REQUIRMENTS:

- **Performance:**

  To ensure effective usability, the system must react to user actions in less than two seconds. It must also be able to support at least 100 concurrent users without experiencing appreciable performance loss.

- **Security:**

  Authorized admin users should only be able to access sensitive capabilities through secure authentication systems, and user data must be secured both during transmission and storage.

- **Usability:**

  In the event of input mistakes or system failures, users should be guided by clear and succinct error messages that are presented in the user interface.

- **Reliability:**

  In the event of a system failure or crash, data loss should be prevented by having a backup and recovery mechanism in place, and the system should be available around-the-clock with little downtime.

- **Scalability:**

  The system must be scalable to support future requirements for more features and functionalities as well as an increasing number of users and data volume over time.

5. STACK:

FRONT END	HTML CSS JAVASCRIPT
BACK END	PYTHON DJANGO
DATABASE	MYSQL
API	REST API

6. FLOW DIAGRAM

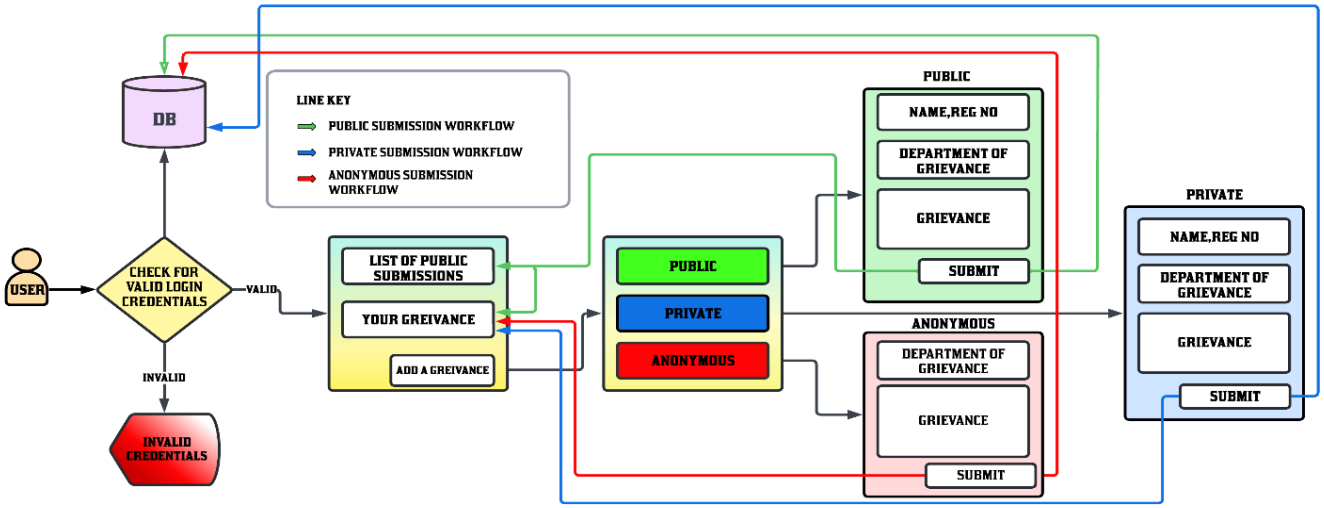

Fig: 1 USER'S INTERFACE

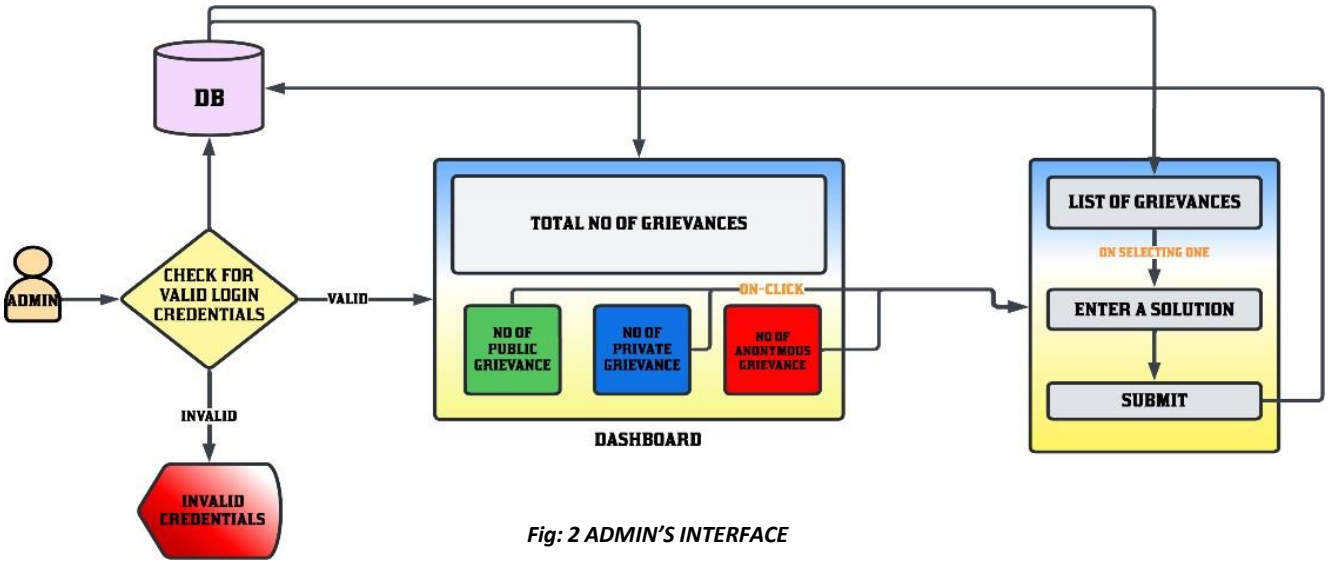

Fig: 2 ADMIN'S INTERFACE

7. ER DIAGRAM:

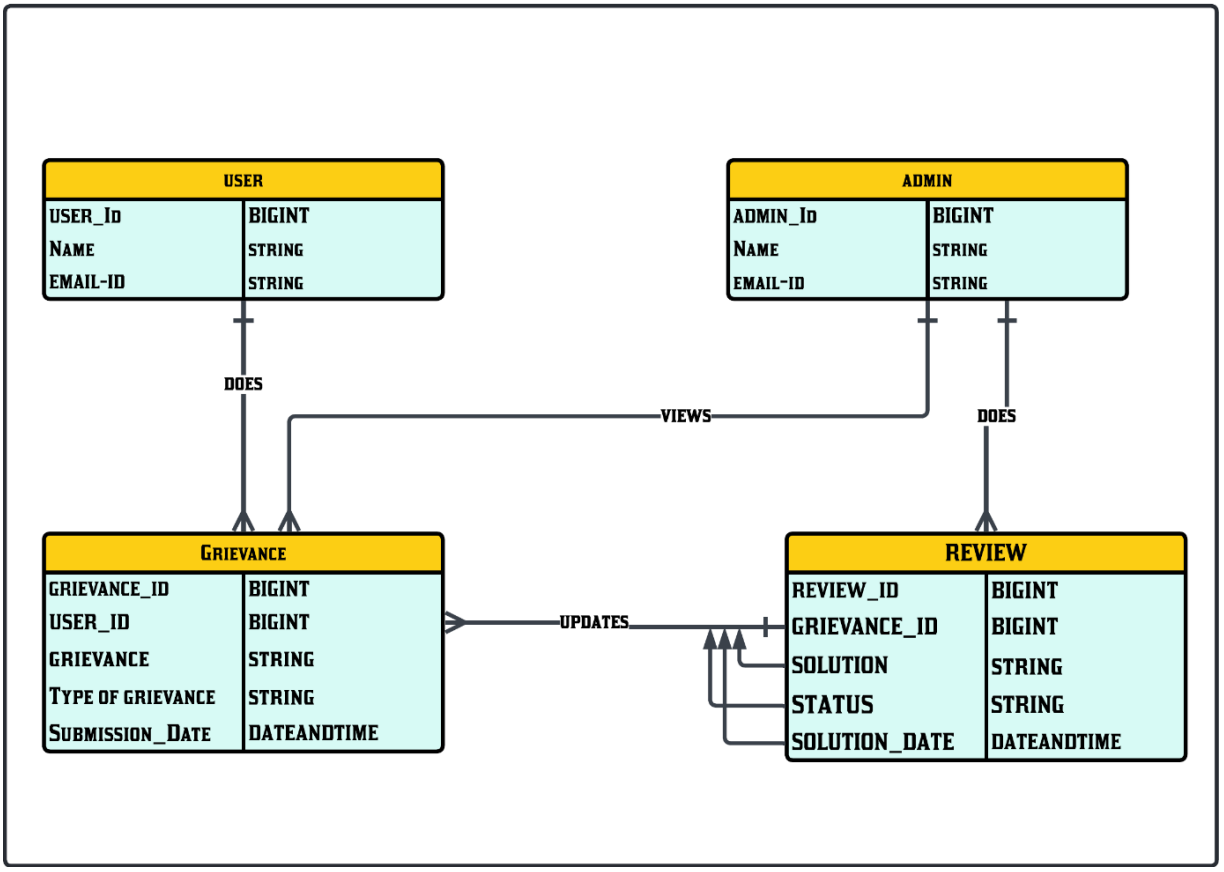

Fig: 3 ER DIAGRAM

8. DEPENDENCIES:

- **Technology Dependencies:**
  - Programming languages and frameworks are required for development.
  - Database management system (DBMS) dependencies for data storage and retrieval.
  - Web technologies and front-end frameworks for user interface development.
  - Server infrastructure dependencies for hosting the portal.

- **External Service Dependencies:**
  - Authentication and authorization services for user access control.
  - Analytics and reporting tools for tracking usage and generating reports.

9. CONCLUSION:

The Portal described in this SRS is essential to the openness and effectiveness of our organization's grievance handling process. We guarantee a seamless experience for all stakeholders with strong functionality, including user authentication, optimized processes, and reporting tools. Our dedication to honesty is demonstrated by our adherence to data privacy standards and our cooperation with legal and technical entities. This site demonstrates our commitment to timely resolution and stakeholder satisfaction.