Grievances and Redressal Portal - Software Requirements Specification (SRS)

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Technical Components

Component	Tech Stack
Frontend	Angular
Backend	Express.js , Node.js
Database	MongoDB
API	RESTFul API / GraphQL APIs

1. Introduction

1.1 Purpose

The purpose of the Grievances and Redressal Portal is to provide an efficient and confidential platform for students and faculty members to submit their grievances, ensuring their anonymity. This portal aims to facilitate effective communication between the stakeholders and the management team, enabling swift resolution of issues and fostering a harmonious academic and work environment. By centralizing the grievance redressal process, the Grievances and Redressal Portal enhances transparency, accountability, and trust within the institution, ultimately contributing to its overall success and reputation.

1.2 Scope

The Grievances and Redressal Portal is designed to serve as a centralized platform for students and faculty members to submit grievances and seek redressal. The portal will streamline the grievance handling process, improve transparency, and ensure timely resolution of issues.

2. Overall Description

The is a web-based application that facilitates communication between students/faculty and the Management regarding grievances. The Grievances and Redressal Portal system will provide functionalities for:

- User registration and login using institutional email address
- Separate forms for grievance submission by students and faculty
- Anonymity for grievances addressed by the Management team
- Setting time constraints for receiving a response from the Management
- Automatic grievance status updates after resolution

- Three grievance submission options:
  - Public: Visible to everyone with the option to upvote existing issues (or) Public Grievance: Visible to everyone. Users can upvote existing grievances instead of submitting duplicates.
  - Private: Sent directly to a designated recipient with login credentials
  - Anonymous: Sent to a designated recipient without login credentials

3. Functional Requirements

3.1 User Management

- Users shall register using their institutional email address, eliminating the need for separate password creation .
- Role-based access control will restrict access to functionalities based on user type (Student/Faculty/Management).
- User profiles will allow for basic information updates.
- Two-factor authentication shall be implemented as an optional security layer.

3.2 Grievance Submission

- Dynamic forms shall adapt to capture relevant details based on user type (Student/Faculty) and chosen grievance category.
- Allow users to categorize their grievances into specific categories such as academics,reward points, skills, infrastructure, administrative issues, harassment, etc. This will help in organizing and prioritizing the grievances for the management team.
- The system shall allow attachments (e.g., documents, images) to support grievance details.
- Users shall define a timeframe for receiving a response from the Management team, setting clear expectations for resolution.

3.3 Grievance Management

- The Management team shall have a dedicated dashboard for centralized grievance management.
- Grievances shall be presented anonymously to the Management team, protecting user identities.
- The Management team will be able to:
  - Assign grievances to specific staff members for targeted resolution based on expertise.
  - View grievance details, attachments, and resolution history.
  - Compose detailed responses within the portal, facilitating two-way communication.
  - Mark grievances as "Resolved" with an option to provide a public or private resolution explanation.
  - Track resolution timelines and identify potential delays for proactive intervention.

3.4 Grievance Tracking

- Users shall have a dedicated portal to view the status of their submitted grievances in real-time.
- Automatic notifications shall be sent to users upon receiving a response from the Management team.

4. Non-Functional Requirements

4.1 Security:

- User login credentials shall be securely stored using industry-standard hashing techniques.
- Access to sensitive data (e.g., grievances) shall be restricted to authorized users.

- The system shall have measures in place to prevent unauthorized access and data breaches.

4.2 Performance:

- The system shall provide a fast and responsive user experience.
- Page loading times shall be minimal.

4.3 Usability:

- The user interface should be intuitive and user-friendly, with clear and concise error messages provided to guide users in case of input errors or system failures.

4.4 Scalability:

- The system should be designed to accommodate an increasing number of users and data volume over time.
- It should be scalable to support additional features and functionalities as per future requirements.

5. User Classes and Characteristics

1. Students:
    - Characteristics: Typically students of the educational institution, with varying levels of technical proficiency.
    - Roles: Can submit grievances, track their status, and receive notifications.
2. Faculty Members:
    - Characteristics: Academic staff of the institution, often busy with teaching and research responsibilities.
    - Roles: Can submit grievances, track their status, and may also be involved in the resolution process.

3. Management Team:

- ● Characteristics: Senior administrative staff responsible for overseeing grievance resolution.
- ● Roles: Can view grievances anonymously, monitor their resolution status, and manage the overall process.

6. Additional Considerations

- ● The system should be adaptable to accommodate future needs and functionalities.
- ● Accessibility features should be implemented to cater to users with disabilities.
- ● Data backup and disaster recovery procedures should be established.

7. Innovative functionalities

- ● **Search Functionality:**

  Allow users to search for existing grievances by keyword or category to see if their issue has already been raised.
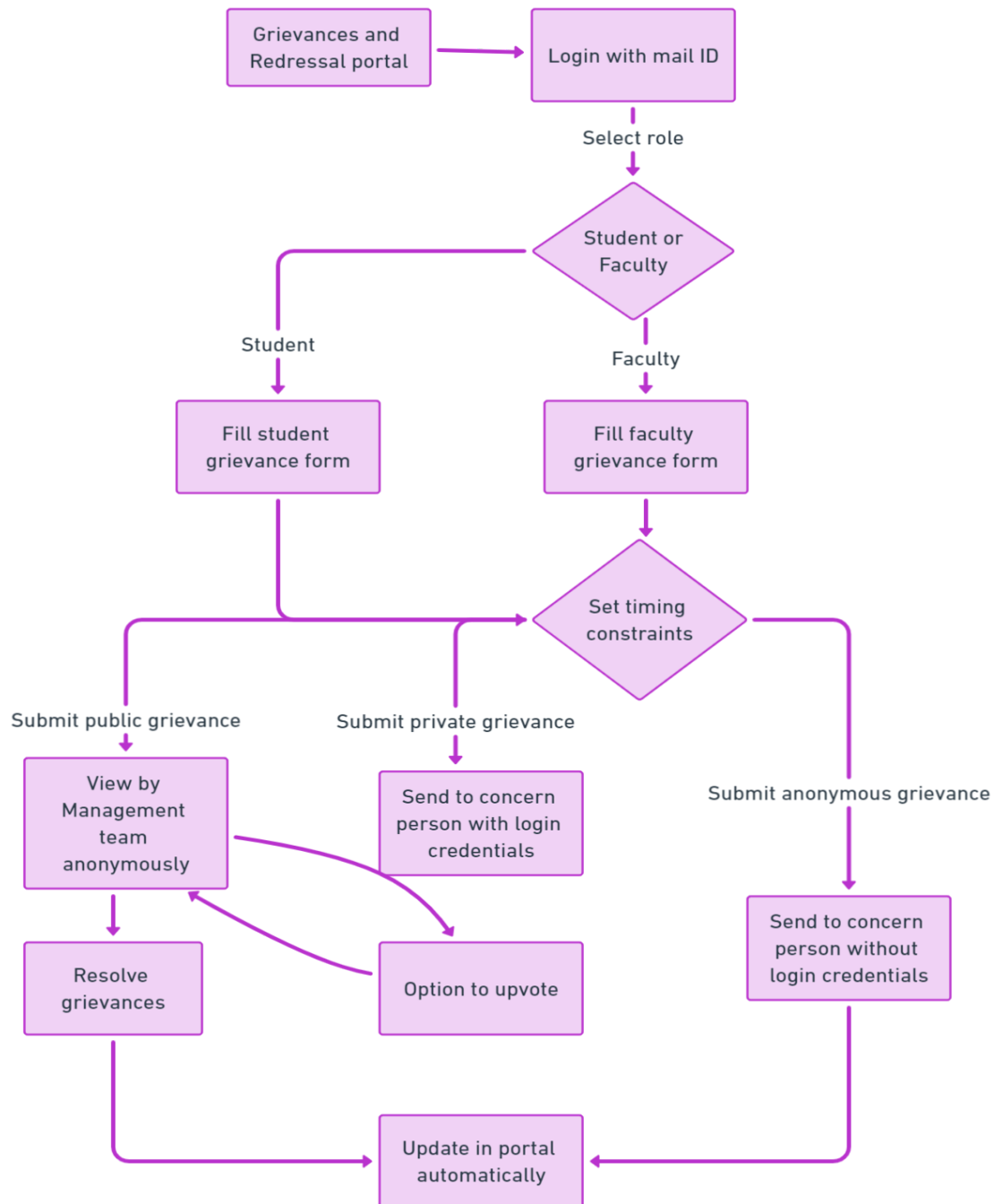
- ● **Track Grievance Progress:**

  Implement a progress bar or timeline to show users the current stage of their grievance (e.g., Resolved, Initiated, Pending).
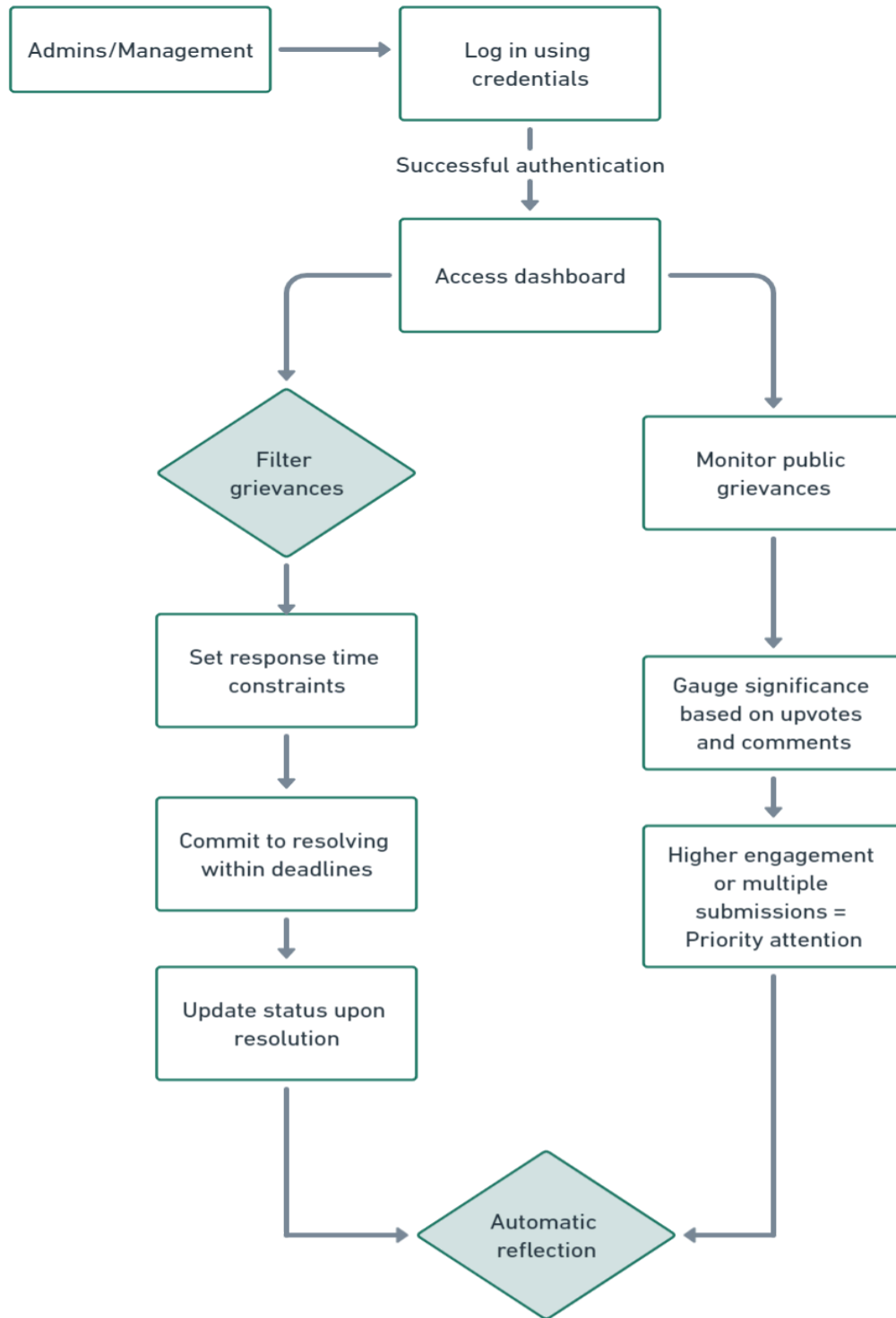
- ● **Feedback System:**

  Allow users to provide feedback on the grievance redressal process and the resolution they received.

8.Work flow

8.1 User's Flow Diagram

8.2 Admin/Management's Flow Diagram

8.3 ER-Diagram

Admin

Id	string
Email	string
Password	string

"provides"

Response

Id	string
Description	string
ResponseTime	string
GrievanceId	string
AdminId	string

User

Id	string
Email	string
Password	string
UserType	string

"views"

"responds to"

"raises"

Grievance

Id	string
Description	string
Category	string
PriorityLevel	string
SubmissionDate	string
Status	string
Type	string
UserId	string
TimingConstraint	string

"receives"

Upvote

Id	string
UserId	string
GrievanceId	string