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Software Requirement Specification Report

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Project ID	**34**
Module Title	**GRIEVANCES AND REDRESSAL PORTAL**
Tech Stack	**MERN**

Implementation Timeline :

Phase	Name	Deadline	Status
Stage 1	Planning and Requirement gathering	May 2, 2024	In progress
Stage 2	Design and Prototyping		Not started
Stage 3	DB Designing		Not started
Stage 4	Backend Implementation		Not started
Stage 5	Testing & Implementation		Not started

Problem Statement :

Develop an integrated grievance redressal system for BIT Sathy, enabling students and faculty to submit their concerns in different forms. Users can submit their grievances in private , public and anonymous forms. The system should provide and ensure anonymous viewing by the management team, and automatically update the portal upon grievance resolution.

- **Grievance report creation :** Allow students and faculty members to create the grievances report in public , private and anonymous way.
- **Grievances redressal** : Faculty members are assigned to address the grievances reported by the other students and faculties . And grievances are addressed in a short period of time.

Technical Components :

Components	Tech Stack
Frontend	**React**
Backend	**Node.js with Express.js**
Database	**Mongo DB**
API	**Open API**

Project Flow

Introduction :

At BIT Sathy, a streamlined grievance redressal system is imperative for resolving issues promptly and confidentially. This system must offer separate, anonymous channels for students and faculty to voice their concerns while enabling the management team to address grievances discreetly. By fostering open communication and ensuring timely resolution, such a system contributes to a harmonious and supportive educational environment conducive to learning and growth.

Functional Requirements :

❖ Grievance report creation :

- ➢ The system shall provide a user interface for students and faculties including teaching and non-teaching faculties to create grievances report in the portal.
- ➢ Users shall submit their name , select the concerned department or faculty to whom they want to submit their grievances.
- ➢ Report can be submitted and addressed at any time of the day .

❖ Faculty allocation :

- ➢ A faculty is assigned to address the grievance reported by the users .
- ➢ Faculty allocation is handled by the concerned department to which the grievance is reported. Any member in the department can address and view the grievance .
- ➢ Grievance can be reported to a single faculty by the users.

❖ Token Raising:

- ➢ The system shall provide an interface for the user to raise token for important and emergency grievances.
- ➢ Faculty members should address the grievance within the given period of time.
- ➢ Only a limited number of tokens can be raised by the users .

❖ Communication Module :

- ➢ The system shall integrate functionality to send automated email/SMS notifications to students and faculty.
- ➢ Notifications shall include grievance addressed notification ,Changes to the grievance reply, grievance deleted notification.

- **Handling Anonymous grievances :**
  - ➢ The system shall implement logic to manage grievances to be anonymous to all the students and faculties.
  - ➢ Students shall be promptly informed of any changes to their grievance via email/SMS.

Non-Functional Requirements :

- **Usability :** Intuitive and user-friendly interface for students and administrators. Responsive design to support different devices and screen sizes. Provide clear instructions and help documentation.
- **Reliability :** Minimal downtime and data integrity for grievance information . Implement data backup and recovery mechanisms. Fault tolerance and error handling capabilities.
- **Maintainability :** Well-documented code and design decisions for easy maintenance. Adherence to coding standards and best practices. Separation of concerns and loose coupling between components.
- **Performance :** Ability to handle high concurrency during peak addressing periods. Prompt delivery of notifications. Optimized database queries and caching mechanisms for faster response times.
- **Security :** Secure student data and communication channels. Restricted access to sensitive information. Implement industry-standard encryption and authentication protocols. Regular security audits and vulnerability testing.

System Overview :

Users :

- **Students :**

  Students will be the one of the two primary users of the system. They will be able to submit their grievances in any time of the day and get notified about their status. They are able to reply to the public grievances and upvote them if they feel it is their issue as well.

- **Faculty :**

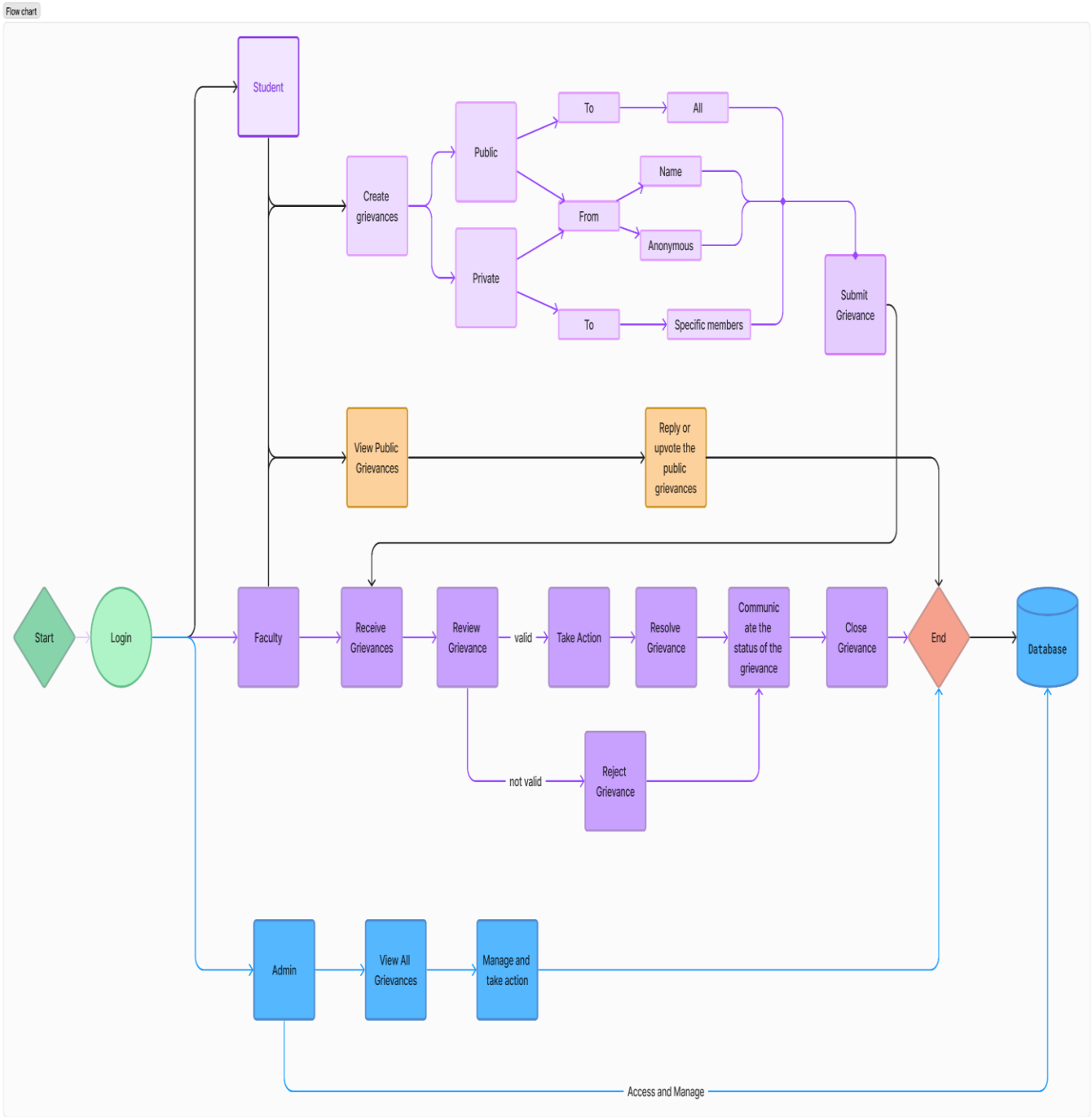
  Faculties will also be the one of the two primary users of the system. They will be able to submit their grievances in any time of the day and get notified about their status. They are able to reply to the public grievances and upvote them if they feel it is their issue as well. They also have the responsibility to address the grievances of the other students and faculties.

- **Administrators :**

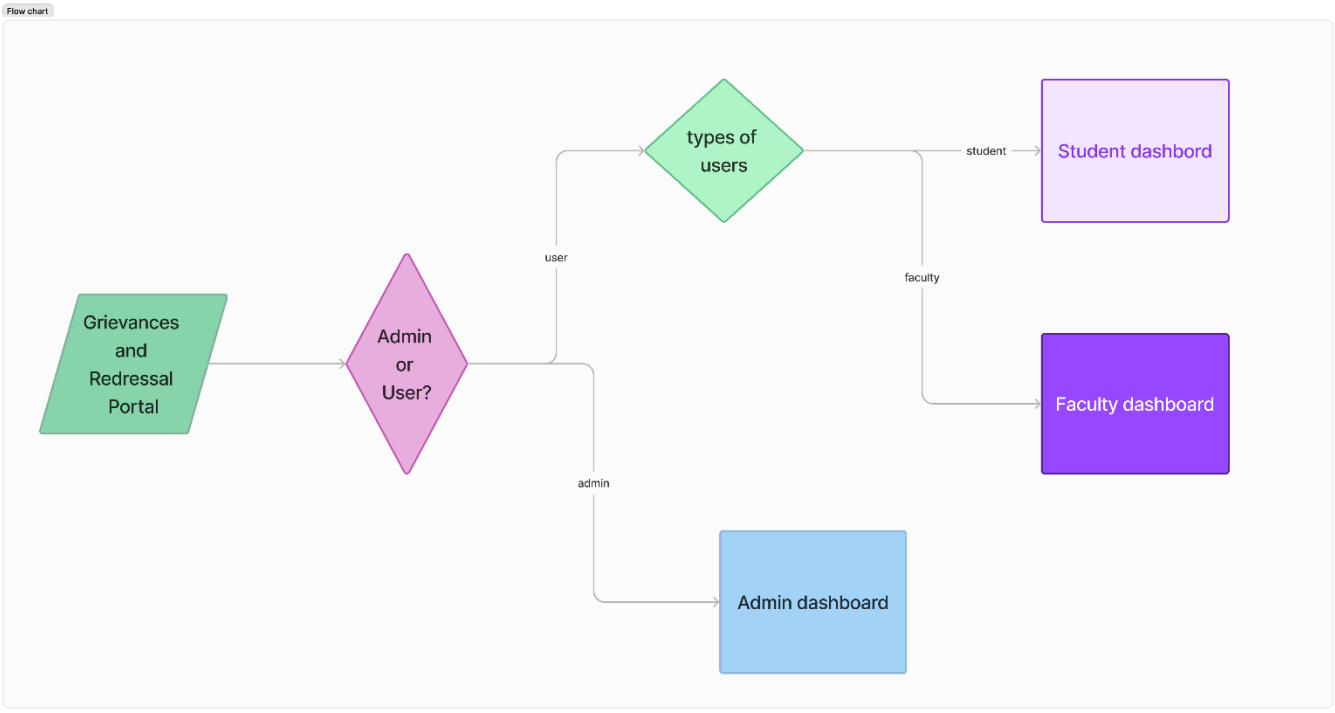
  Administrators will manage and oversee the overall functioning of the system. They will have access to student and faculty grievances data and can manage and delete the grievances if they are false.

Flow Chart :

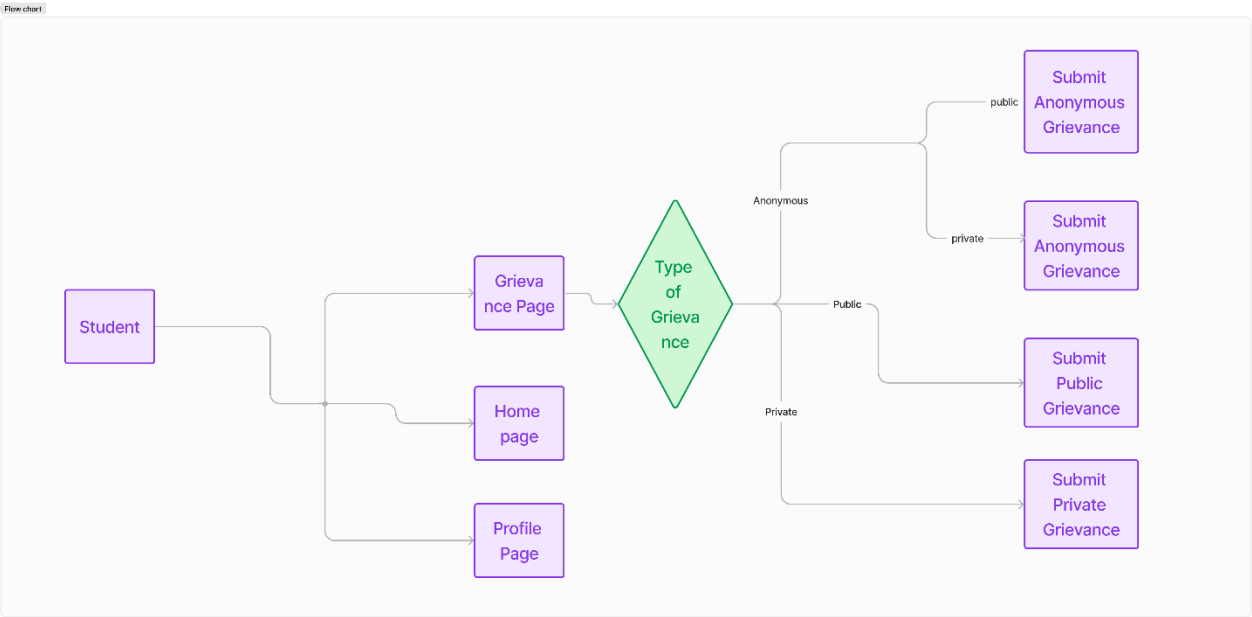
Workflow :



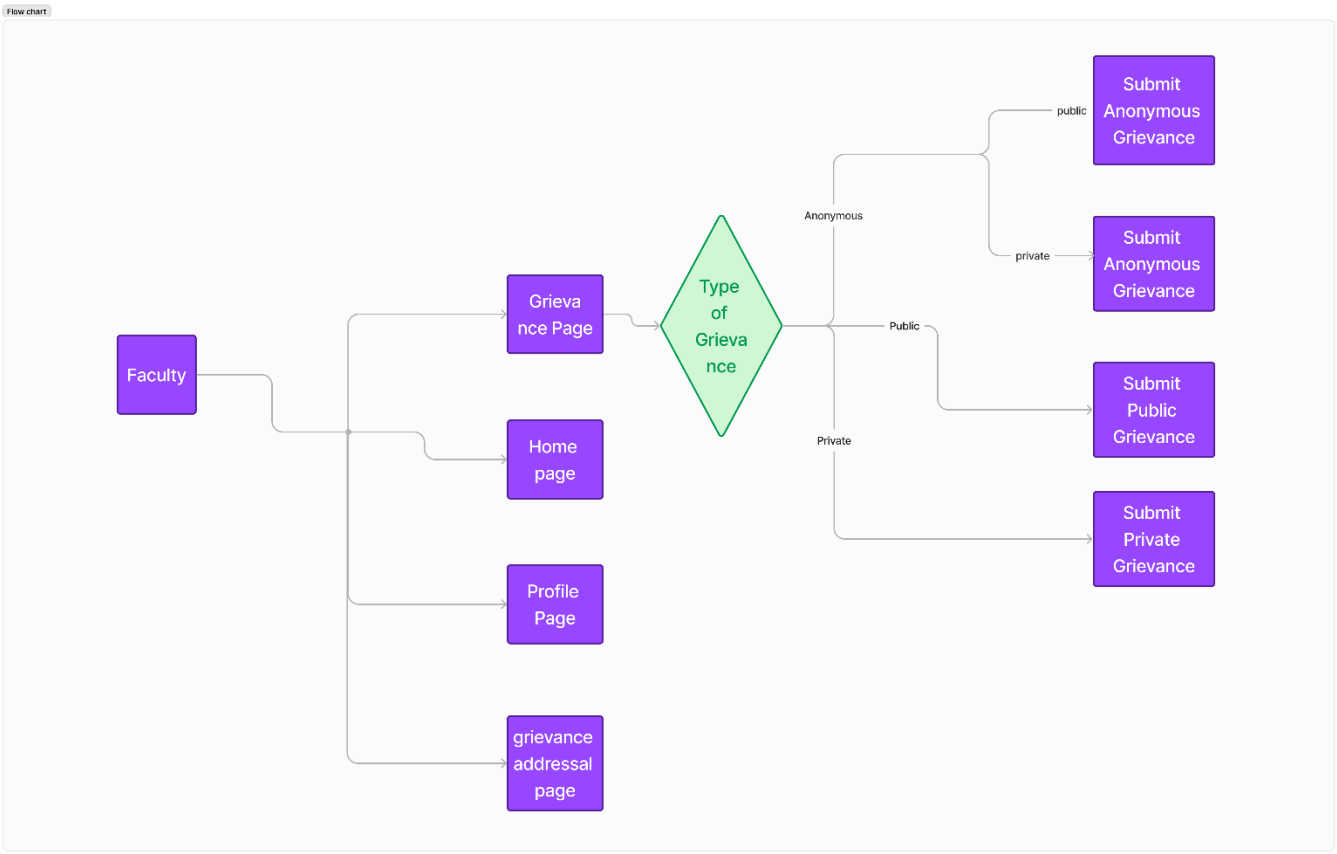
Login :


Flow chart
Grievances and Redressal Portal
Admin or User?
user
admin
types of users
student
faculty
Student dashbord
Faculty dashboard
Admin dashboard

Student Dashboard :



Faculty dashboard :



Admin dashboard :