

Software Requirement Specification for Faculty Log

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Project ID : 10

Technical Components:

Front End	<ul style="list-style-type: none">● HTML● CSS● JS
Back End	<ul style="list-style-type: none">● Python● Django(Python Web)
Database	<ul style="list-style-type: none">● PostgreSQL● MySQL
API	<ul style="list-style-type: none">● OpenAPI● SOAP APIs● RESTFul API

Problem Statement:

In an educational institution, various departments independently send schedules to faculty members without a centralized coordination system. This decentralized method of scheduling can lead to conflicts and overlapping tasks, causing significant issues for the faculty.

Inconsistent messaging: This leads to duplication of schedules.

Overlapping Tasks: Faculty members may receive multiple tasks scheduled at the same time from different departments. This results in an inability to fulfill all assigned tasks, leading to confusion and potential neglect of responsibilities.

Administrative Burden: Resolving scheduling conflicts requires significant administrative effort, including constant communication between departments and

faculty, manual adjustments to schedules, and potential rescheduling of classes or tasks.

Project Workflow:

Purpose:

To Develop a centralized mailing system for faculties, to efficiently manage the task allotment for them. This resolves the Overlapping of tasks for faculties.

Scope:

User Authentication: This indicates that the system will have a feature where users (presumably faculty members and administrators) will need to authenticate themselves, ensuring security and access control.

Admin Functionality: Admins will have additional privileges, specifically the ability to assign or reject tasks based on faculty availability. This suggests a workflow management component within the system. The list of approved tasks will be visible to the admins in their dashboard.

Email Notifications:

Automated email notifications will be sent based on task assignment status:

- When a task is assigned to a faculty member, they will receive an email notification informing them of the task details.
- If a task is rejected by the administrator, the sender (presumably another faculty member or department staff) will receive an email notification indicating the rejection.

Business Context:

The centralized mailing system is aimed at enhancing communication between Departments and faculties, across the institution. It assigns the task efficiently without task overlapping.

Consideration:

- Google account for authentication.
- Access to the internet.

Dependencies:

- Integration with Google OAuth for user authentication.
- Gmail API.

Users

- **Faculty:** Receive email notifications of allotted tasks.
- **Administrators:** Assign or reject tasks based on faculty schedules.
- **Department Staff:** Allot tasks to faculty.

Functional Requirements:**User Authentication**

- **Google OAuth Integration:**
 - Users must authenticate using their Google account.
 - Secure login and logout functionality.

Email Notifications

- **Task Assignment Notification:**

- Automated email to faculty when a task is assigned.
 - Email content: Task details, due date, priority.
- **Task Rejection Notification:**
 - Automated email to the sender if a task is rejected.
 - Email content: Rejection reason, possible next steps

Dynamic Dashboard

Admin Dashboard:

- View all task requests.
- Accept or reject tasks.
- View faculty availability.

Non-Functional Requirements

Performance:

- Fast response times for dashboard updates and email notifications.

Security:

- Secure user authentication and data access.
- Protection against common web vulnerabilities (e.g., SQL injection, XSS).

Usability:

- User-friendly interface for dashboards and forms.
- Easy navigation and task management.

Reliability:

- High availability and minimal downtime.
- Reliable email delivery system.

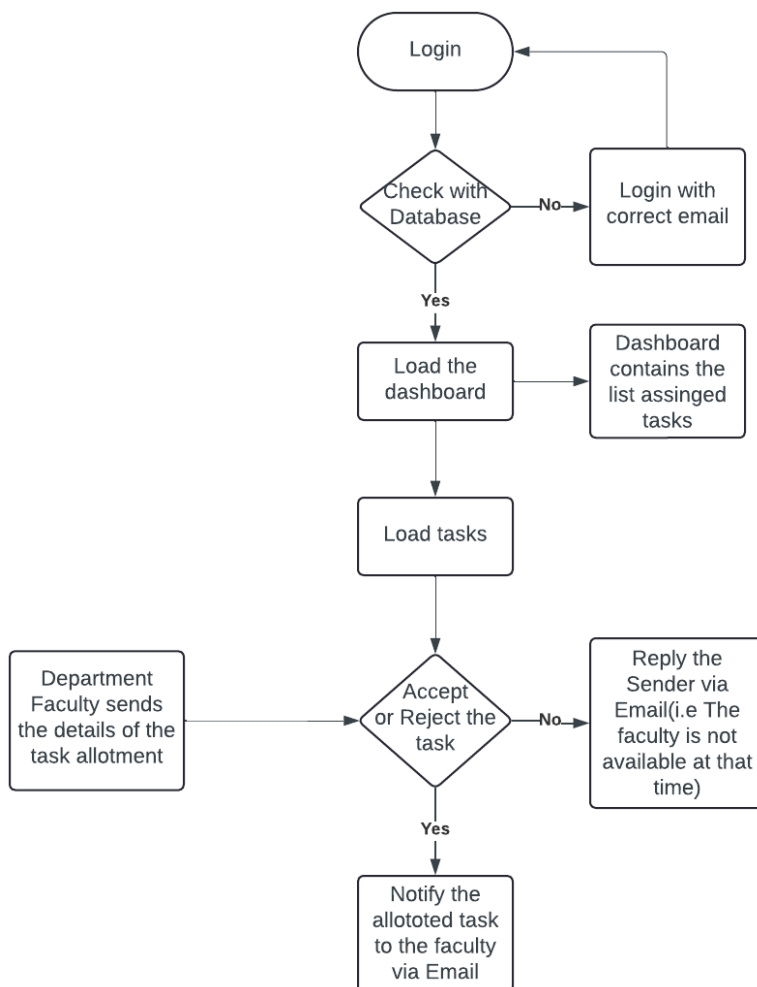
Assumptions

- Users have access to Google accounts for authentication.
- Continuous access to the internet for using the system.

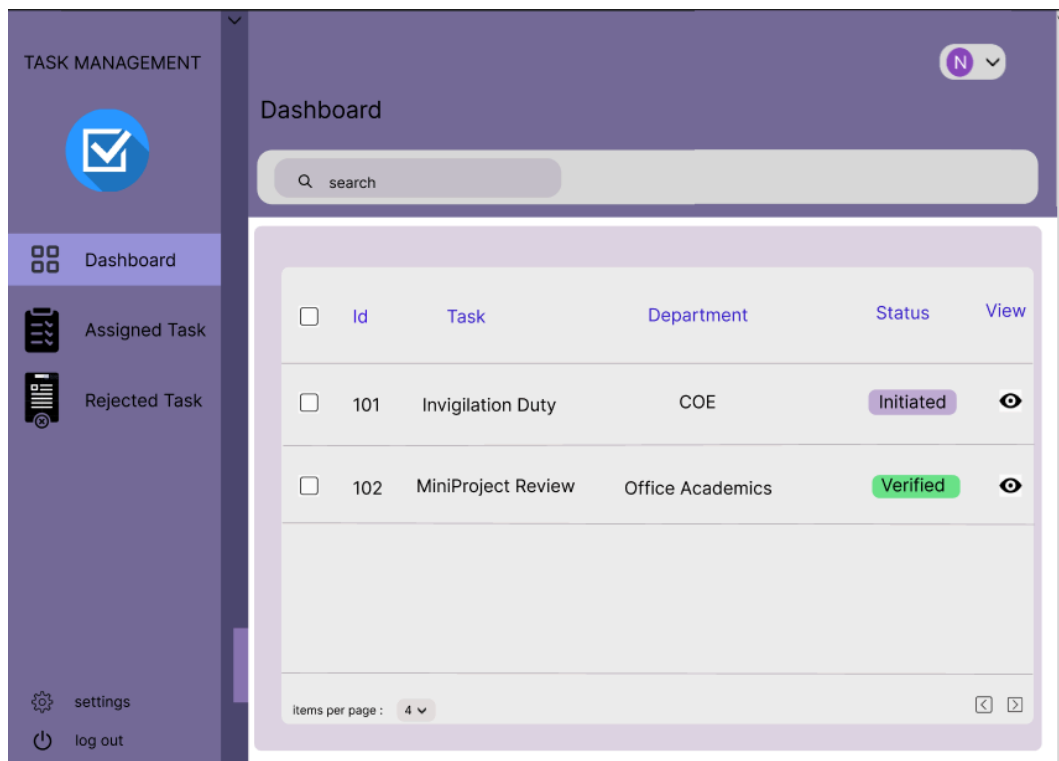
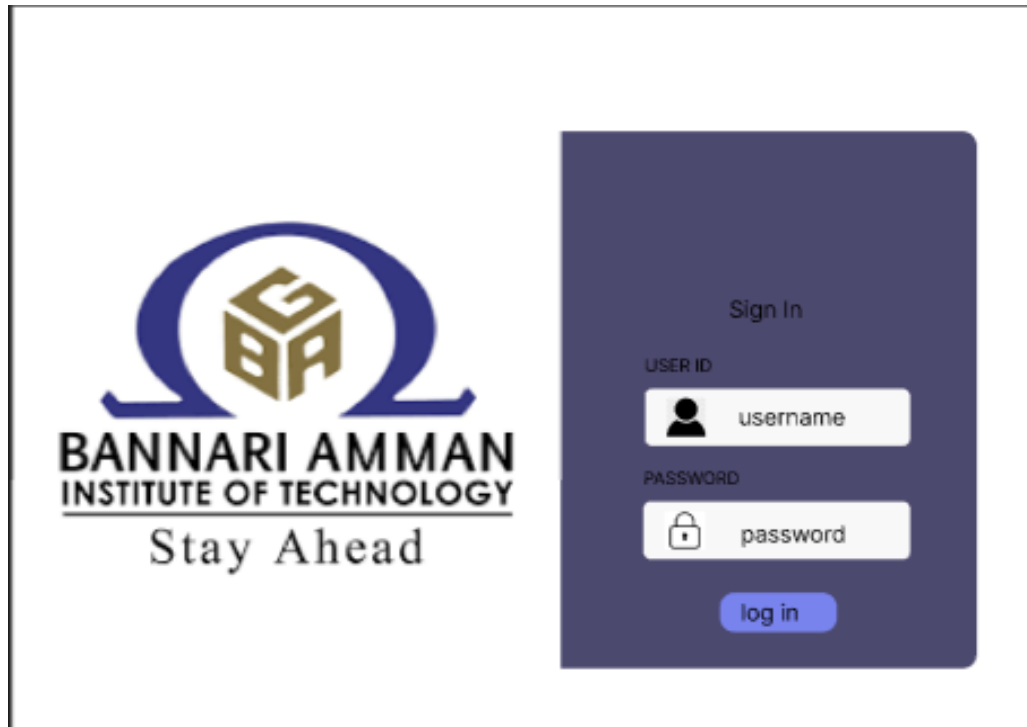
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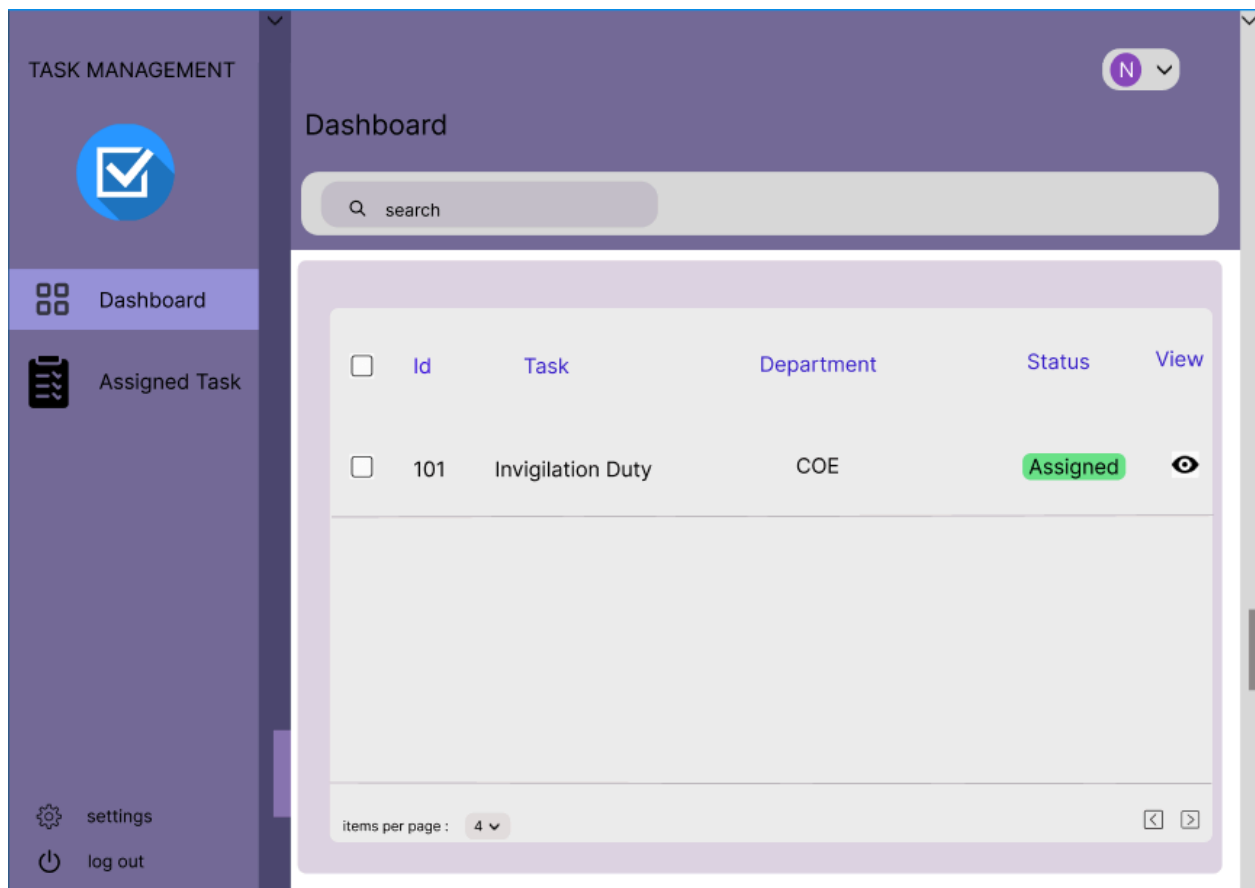
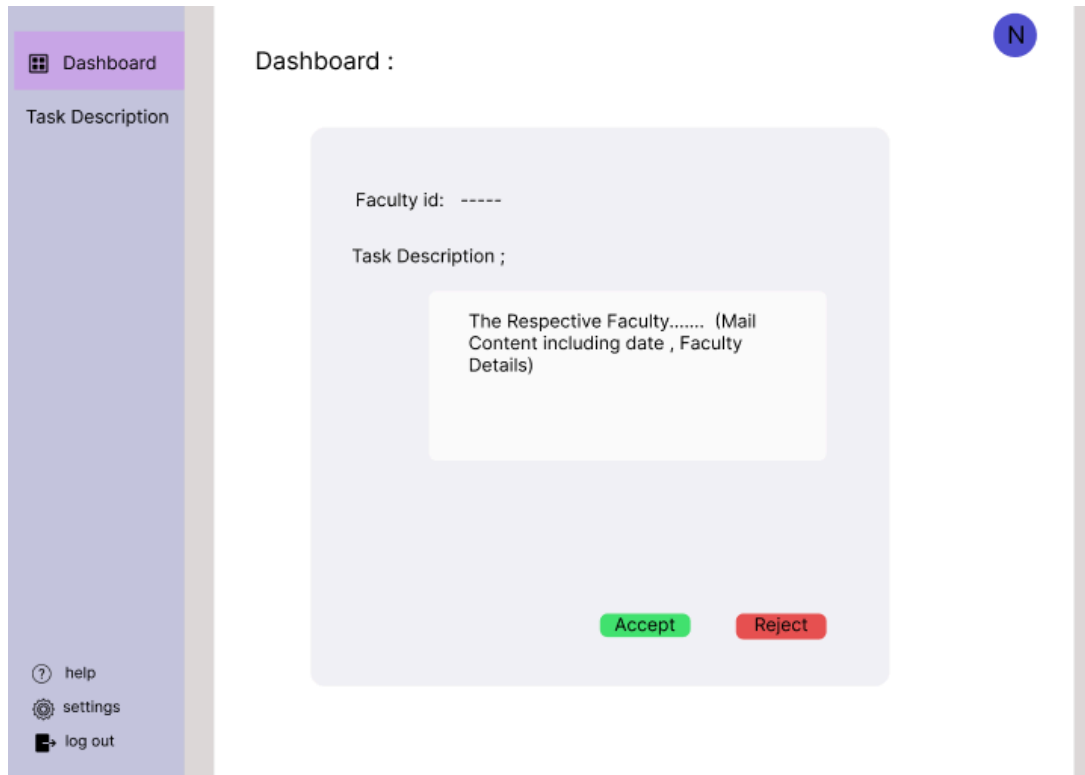
- **Data Security:** Ensuring the security of user data during authentication and task management.
- **Email Delivery:** Potential issues with email notifications being marked as spam.

FlowChart:



Prototype:





TASK MANAGEMENT



Dashboard



Rejected Task



settings



log out



Dashboard

search

<input type="checkbox"/>	Id	Task	Department	Status	View
<input type="checkbox"/>	102	MiniProject Review	Office Academics	Rejected	

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