

## SOFTWARE REQUIREMENT SPECIFICATION

<b>Name</b>	Mukhil V
<b>Register number</b>	7376221CS235
<b>Project ID</b>	23
<b>Seat number</b>	63
<b>Problem statement</b>	Approval of Onduty for the students

### PROBLEM STATEMENT:

The existing manual procedure used by educational institutions to approve requests for students to be on duty is laborious and ineffective. This method entails paper documents, several signatures, and difficult stakeholder contact, which causes delays, mistakes, and administrative difficulties. As a result, it can be challenging for students to get timely clearances for their on-duty activities, which might impede their ability to advance academically and professionally.

A digital solution that centralizes and automates the workflow is essential to overcome these issues and expedite the on-duty approval procedure. By offering a user-friendly platform for submission, tracking, and effectively managing on-duty requests, this system hopes to benefit administrators, parents, staff, and students alike. The implementation of digitalization in the approval process is expected to improve communication, minimize administrative burden, and guarantee prompt approvals for students' on-duty activities.

## TECHNICAL COMPONENTS:

FRONTEND	<ul style="list-style-type: none"><li>• HTML</li><li>• CSS</li><li>• JS</li></ul>
BACKEND	<ul style="list-style-type: none"><li>• MySQL</li></ul>
DATABASE	<ul style="list-style-type: none"><li>• Python</li><li>• Django(Python Web)</li></ul>

### 1. INTRODUCTION:

A web-based solution called the On-Duty Approval Portal is being created in response to the difficulties students and teachers encounter in getting clearances for on-duty activities. The purpose of this site is to facilitate stakeholder communication, simplify the approval process for on-duty requests, and increase the effectiveness of on-duty request management at educational institutions.

### 2. PURPOSE:

This Software Requirements Specification (SRS) document aims to provide clients a thorough overview of the features and specifications of the On-Duty Approval Portal. This document acts as a roadmap for the development team to efficiently design, implement, and test the web application by outlining the functional and non-functional requirements of the system.

### 3. OBJECTIVES:

- Stating the application's functional and non-functional needs in clear terms.
- Defining the main players in the project and their responsibilities.

- Describing the features and functionalities that will be included in the project and its scope.
- Bringing stakeholders' knowledge of the project's objectives and deliverables to consensus.
- Supplying a foundation for resource allocation, estimation, and project planning.

#### 4. SCOPE:

The goal of the Approval of On-Duty for Students system is to improve the effectiveness of educational institutions' on-duty request approval processes. Students can submit online requests for on-duty work that include the event's details, date, time, and purpose. The approval sequence is automated by the system, which processes requests through deans, mentors, parents, and special lab professors in order of submission. Notifications and updates are sent to all stakeholders involved in the approval process to help with communication. Users may monitor the progress of their on-duty requests and see their approval history using a dashboard interface. This approach guarantees a fast procedure for handling on-duty approvals by placing a high priority on effectiveness, transparency, and communication.

#### 5. STAKEHOLDERS:

**Students:** Students are the system's main users; they will utilize the platform to submit requests for on-duty time and monitor the status of their approval. They will communicate with the system to provide the necessary information and get notifications on the progress of their requests.

**Special Lab Faculty:** Special lab faculty members will examine student requests for on-duty time, confirm the specifics of the event, and provide permission as required. They are essential in making sure that demands made while on duty are acceptable and reasonable.

**Parents/Guardians:** In order to provide permission or acknowledgement as needed for the approval process, parents or guardians of students will get automated communication about requests to be on-duty. In order to guarantee parental approval for student on-duty activities, their participation is important.

**Mentors:** After reviewing requests for on-duty time, mentors assigned to students will either approve them or offer comments based on their evaluation. Their approval signifies academic support and guidance for student on-duty activities.

**Admin:** Admin oversee the overall functioning of the system, ensuring compliance with institutional policies and addressing any administrative or technical issues that may arise. They have the authority to finalize on-duty approvals and resolve any disputes or discrepancies.

## **6. SYSTEM OVERVIEW:**

Administrators supervise how the system operates as a whole, making sure that institutional policies are followed and taking care of any potential administrative or technological problems. They have the authority to resolve any disagreements or inconsistencies and complete on-duty authorizations

### **Features:**

#### **User Authentication and Authorization:**

- Students, mentors, and special lab faculty can log in to the system using their login credentials simply due to secure user authentication.
- Role-based access control limits access to particular features according to the roles of the users.

#### **On-Duty Request Submission:**

- Using the user-friendly interface, students may submit requests for on-duty time by providing the date, time, reason for the on-duty, and specifics of the event.

#### **Approval Workflow:**

- The system automates the approval process, allowing mentors and special lab professors to proceed with on-duty requests through several approval phases.

**Real-time Notifications:**

- Students receive popup notifications in the system interface if their on-duty request is declined at any stage of the approval process.
- Email notifications are sent to special lab faculty and mentors upon receiving an on-duty request for their review.

**Data Privacy and Security:**

- To maintain data privacy and confidentiality, student information is securely saved and linked to their login credentials.
- The purpose of implementing access controls is to prevent unauthorized parties from accessing sensitive data.

**Reporting and Record-Keeping:**

- For authorized on-duty requests, thorough reports are produced that include event specifics, approval status, and relevant information.
- These reports make it easier to track on-duty approvals and act as a record for future use.

**7.1 FUNCTIONAL REQUIREMENTS:****User management:**

- Users register with college email and password.
- Role-based permissions for authorized access.
- User roles: students, faculty, mentors, admins.

**On-Duty Request Submission:**

- Students submit requests with event details.
- Faculty review and approve student requests.

**Approval Workflow:**

- Sequential approval stages: faculty, parents, mentors, deans.
- Notifications sent at each approval stage.

**Real-time Notifications:**

- Students receive real-time request updates.
- Faculty and mentors receive email notifications.

**Reporting:**

- Detailed reports for approved requests.
- Records for tracking on-duty approvals.

**7.2 NON - FUNCTIONAL REQUIREMENTS:****Performance requirements:**

- The system should handle multiple user sessions efficiently to accommodate concurrent user interactions.
- Quick response times are ensured for user interactions, such as submitting on-duty requests and viewing approval status.

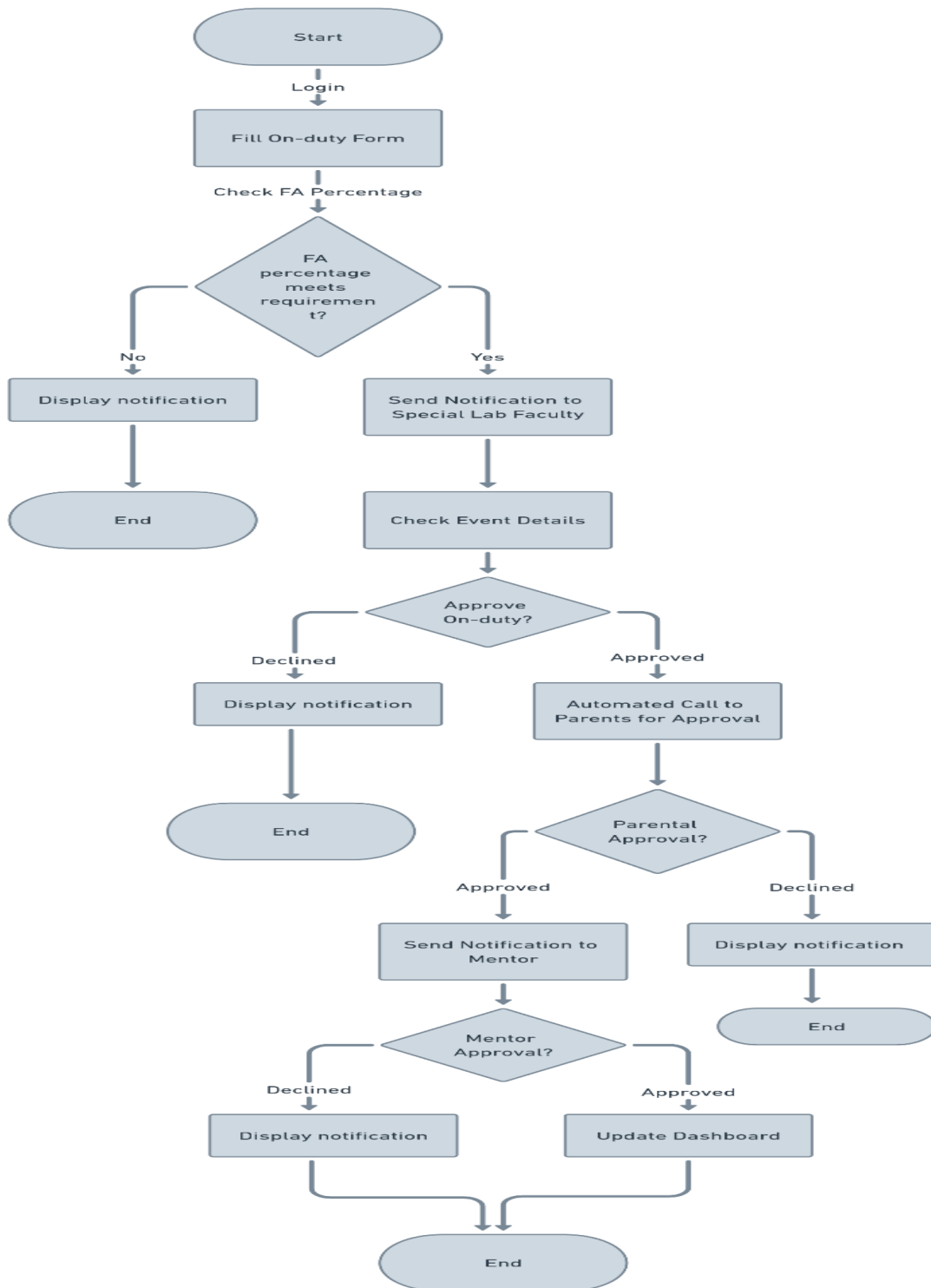
**Security requirements:**

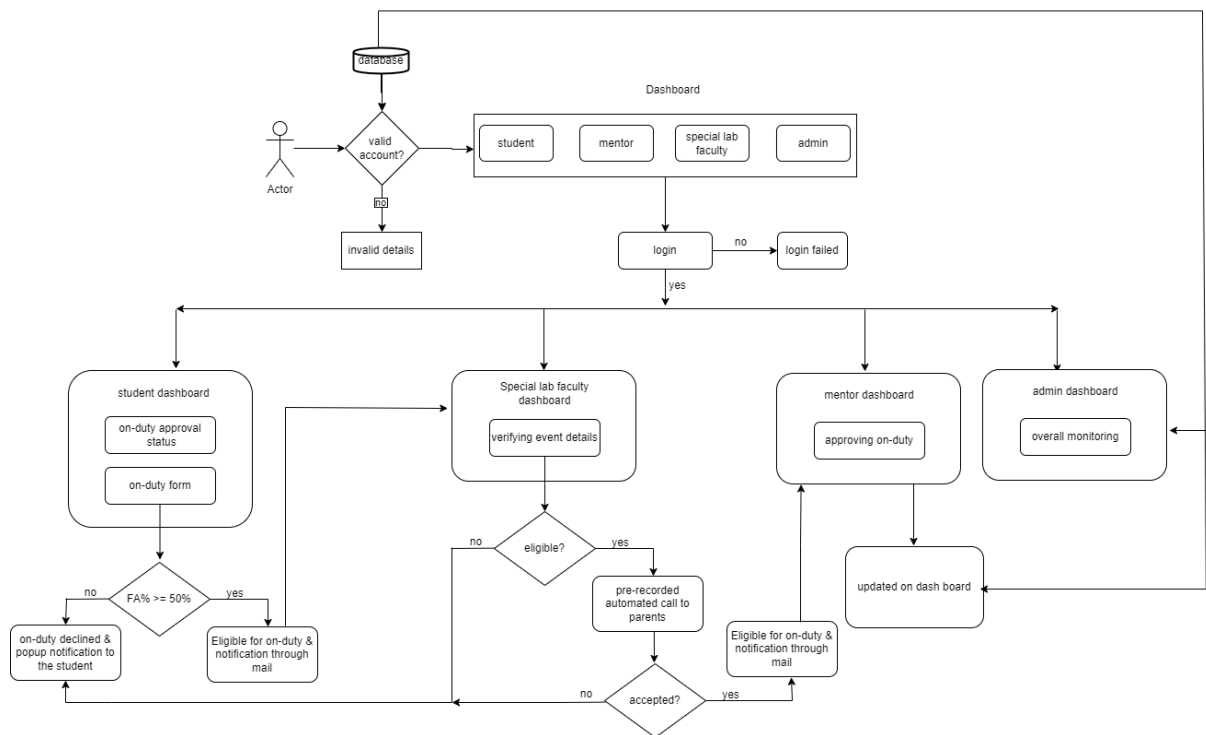
- User authentication and authorization mechanisms are implemented to ensure that only authorized users access the system.

**Usability requirements:**

- The system should provide a responsive and intuitive user interface that is easy to navigate and understand.
- Clear instructions and guidance are provided throughout the system to assist users in submitting on-duty requests and managing appointments effectively.

# FLOW CHART





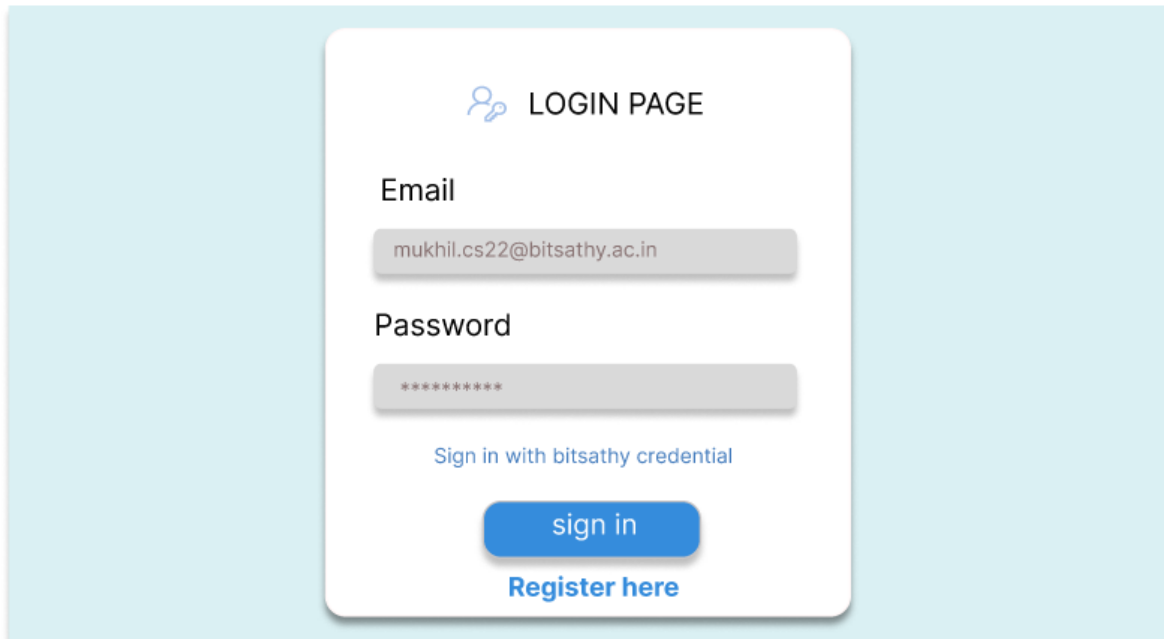
## Prototype of the project:

### 1. Landing page:






## 2.Login page:



A login page UI mockup with a light blue background. A white rounded rectangle contains the login form. At the top, there is a blue icon of two people and the text "LOGIN PAGE". Below this, the label "Email" is followed by a text input field containing "mukhil.cs22@bitsathy.ac.in". The label "Password" is followed by a text input field with masked characters "\*\*\*\*\*". Below the password field, the text "Sign in with bitsathy credential" is displayed. At the bottom, there is a blue "sign in" button and a blue link "Register here".

 LOGIN PAGE

Email

mukhil.cs22@bitsathy.ac.in

Password

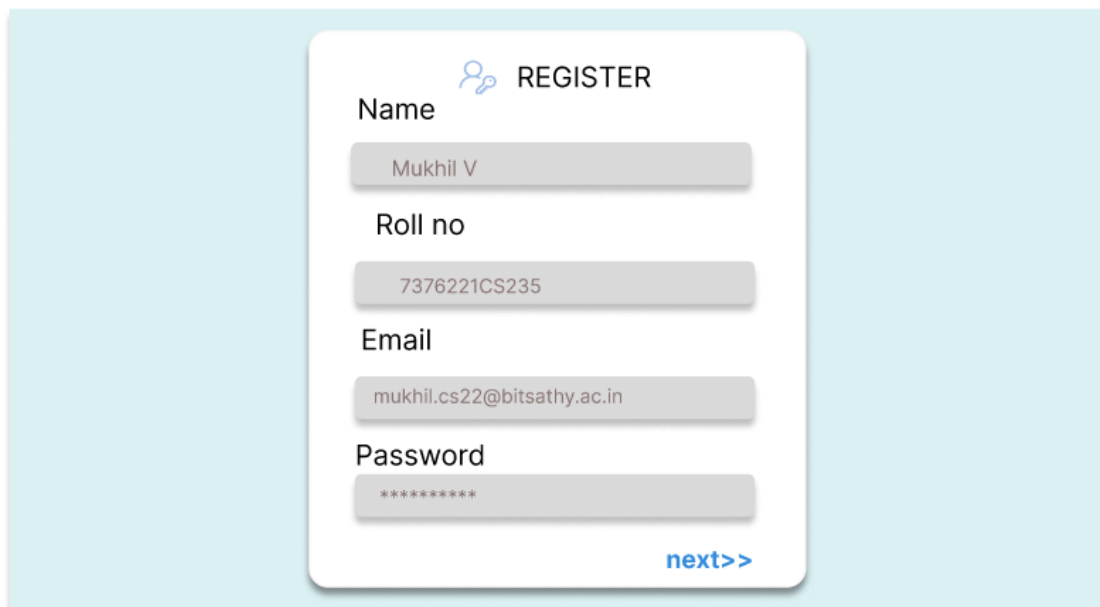
\*\*\*\*\*

Sign in with bitsathy credential


sign in

[Register here](#)

## 3.Register page:



A register page UI mockup with a light blue background. A white rounded rectangle contains the registration form. At the top, there is a blue icon of two people and the text "REGISTER". Below this, the label "Name" is followed by a text input field containing "Mukhil V". The label "Roll no" is followed by a text input field containing "7376221CS235". The label "Email" is followed by a text input field containing "mukhil.cs22@bitsathy.ac.in". The label "Password" is followed by a text input field with masked characters "\*\*\*\*\*". At the bottom right, there is a blue link "next>>".

 REGISTER

Name

Mukhil V

Roll no

7376221CS235


Email

mukhil.cs22@bitsathy.ac.in

Password

\*\*\*\*\*

[next>>](#)

 REGISTER

Special lab faculty mail id

xxxxxx.bitsathy.ac.in

Mentor mail id

yyyyyy.bitsathy.ac.in

Parent mobile number

9790808819


<<previous


Register


#### 4. Student home page:


ON-DUTY APPROVAL PORTAL


M


 HOME

 LEAVE APPLY


 HISTORY

Hello Mukhil V !

 Profile

 Log out

## 5. On-duty form:

 ON-DUTY FORM

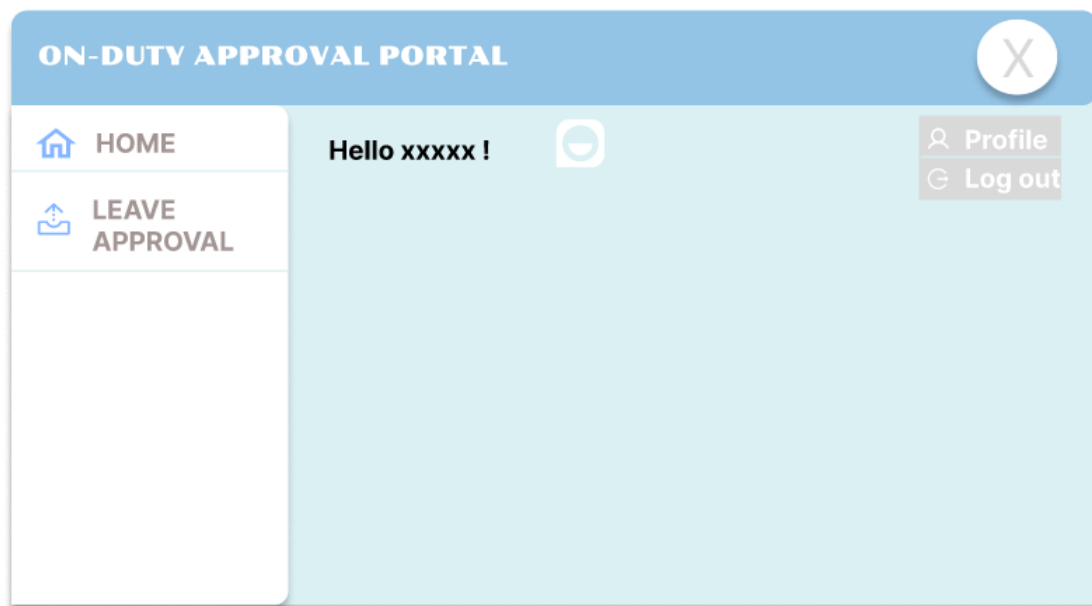
* NAME	MUKHIL V	* ROLL NO	7376221CS235
* EVENT CATEGORY	TECHNICAL EVENT	* TAC ID	33518
* EVENT NAME	CODE NOVA, LUNARA'24	* EVENT DATE	03/05/24 - 04/05/24
* FA PERCENTAGE		* COLLEGE NAME	BIT, SATHYAMANGALAM
ACADEMIC :	80%		
PLACEMENT :	89%		
			SUBMIT

## 6. Student on-duty history:

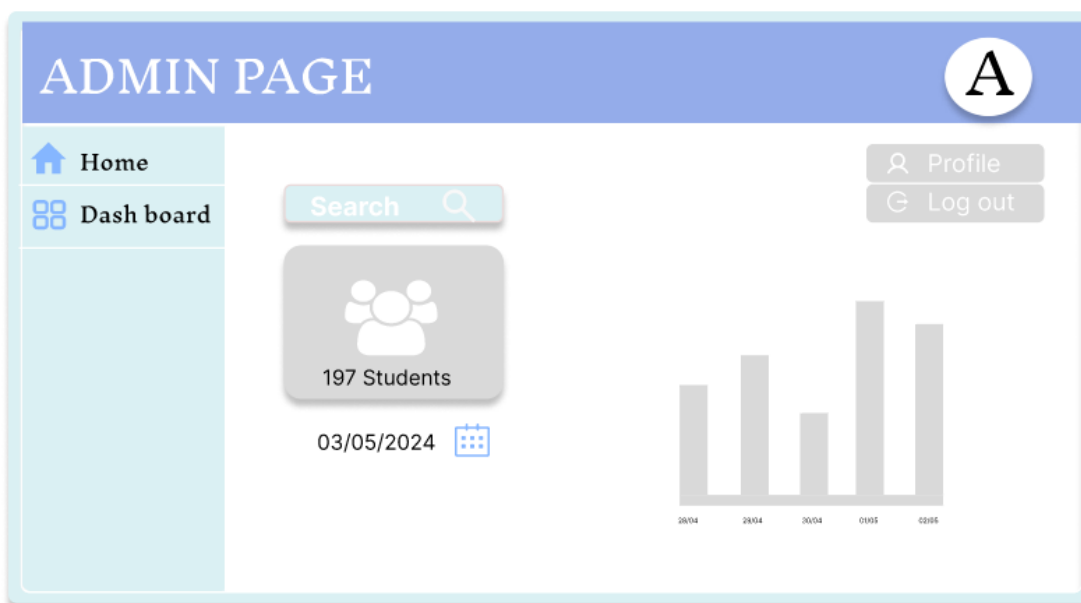
Your Activity Home

Name	Roll No	Event Name	Date	Status
Mukhil V	7376221cs235	LUNARA'24	04/05/2024	Initiated
Mukhil V	7376221cs235	PRAYUKTI'24	27/04/2024	approved
Mukhil V	7376221cs235	YUGAM'24	23/03/2024	rejected
Mukhil V	7376221cs235	YUGAM'24	21/03/2024	approved
Mukhil V	7376221cs235	FUTURA'24	20/02/2024	rejected

## 7. Mentor/Special lab faculty home page:



## 8. Admin Home page:



## 9. Dashboard:

LEAVE APPROVAL

Home

Name	Roll No	Event Name	Date	Details	Approve/Decline	
Mukhil V	7376221cs235	LUNARA'24	04/05/2024	<a href="#">view</a>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Kural J	7376211cb125	PRAYUKTI'24	27/04/2024	<a href="#">view</a>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dheva S	7376222it133	YUGAM'24	23/03/2024	<a href="#">view</a>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nandhitha S	7376221cs237	YUGAM'24	21/03/2024	<a href="#">view</a>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nikithaa G	7376221cs244	FUTURA'24	20/02/2024	<a href="#">view</a>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## PROTOTYPE:

