Software Requirement Specification for TAC Portal

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Project ID	08
Problem Statement	Template Task

Technical Components

Component	**Tech Stack**
Backend	React
Frontend	Node.js with Expess.js
Database	MongoDB
API	OpenAPI

Problem Statement

Staff members may encounter various challenges related to scheduling, venues, timing, and communication in their daily work.Here are some common problems they might face:

1. **Venue Availability**: Difficulty in finding available venues for meetings, classes, or events, especially during peak times or when multiple teams or departments need to schedule activities simultaneously.
2. **Scheduling Conflicts**: Conflicts arise when multiple events or meetings are scheduled at the same time, forcing staff members to prioritize or reschedule their commitments.
3. **Poor Communication**: Lack of clear communication channels or ineffective communication methods can lead to misunderstandings, missed messages, and delays in scheduling or task assignment.
4. **Task Overload**: Staff members may feel overwhelmed by an excessive workload, making it challenging to manage their schedules effectively and prioritize tasks appropriately.
5. **Task Duplication**: Duplication of tasks or assignments may occur when there is a lack of coordination between staff members or departments, leading to wasted time and resources.
6. **Inefficient Task Assignment**: Assigning tasks without considering staff members' skills, availability, or workload can result in inefficiencies and may lead to tasks being completed late or below standard.

Project Flow

Purpose:

Staff members often encounter several challenges related to scheduling, venue management, timing, communication among faculty, and task assignment.

Scope:

This system includes user authentication, collaborative features could be expanded to allow for real-time editing and collaboration among multiple users, fostering teamwork and improving task efficiency

Functional Requirements

User Authentication: Users should be able to securely log in to the system using credentials such as username/password.

Search and Filter Functionality: Users should be able to easily search for and filter template tasks based on criteria such as title, category, or creation date, improving navigation and usability.

Notification System: The system should provide notifications to users regarding important events such as upcoming deadlines, changes to template tasks, or collaboration requests.

Customization Options: The system should provide options for users to customize template tasks according to their specific needs, such as adding/removing sections, adjusting formatting, or including supplementary materials.

User Personas

Admin:

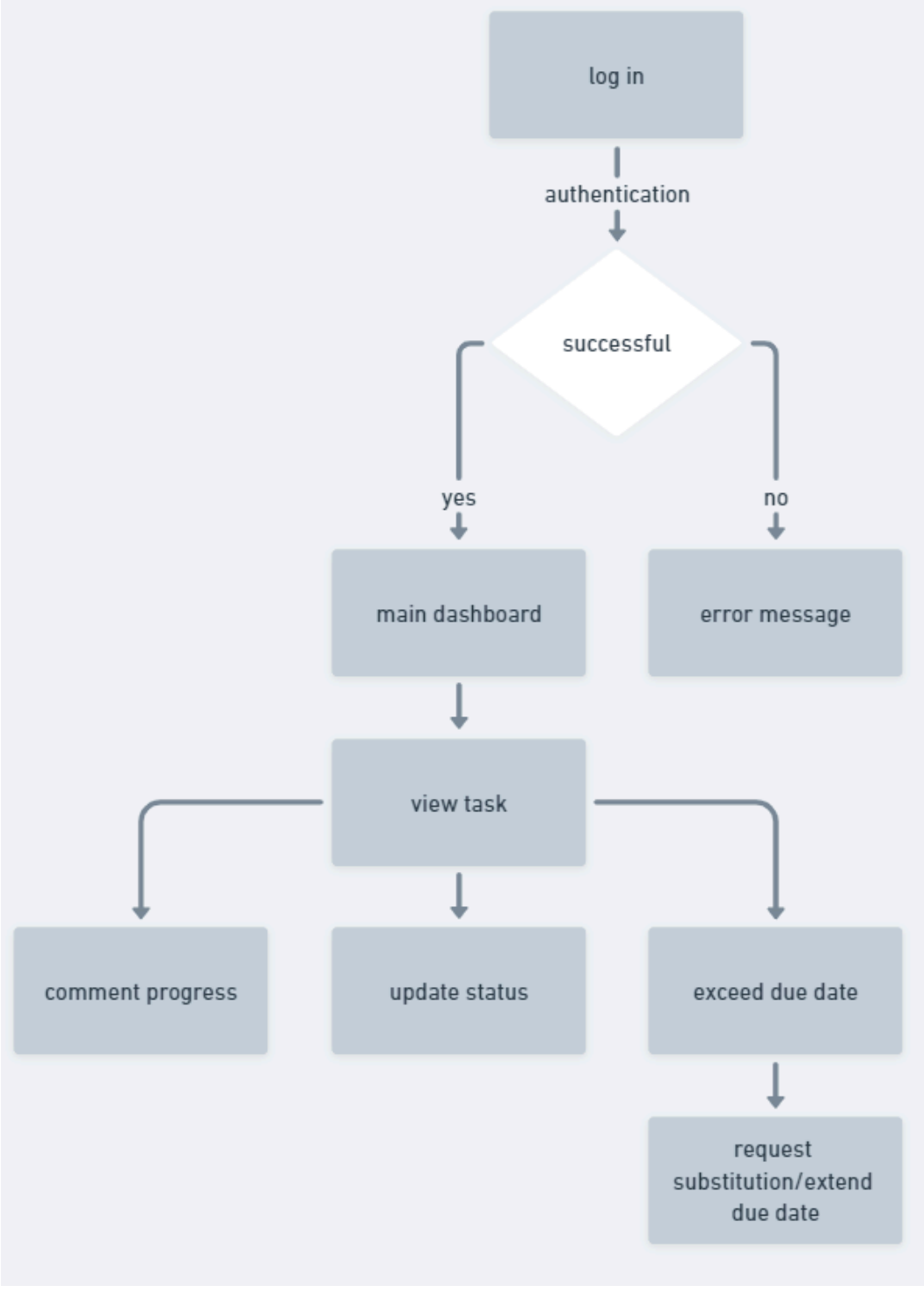
In Template task, administrators handle user access, ensuring the right people have the right permissions. They assign tasks, monitor progress, and step in when needed.

User:

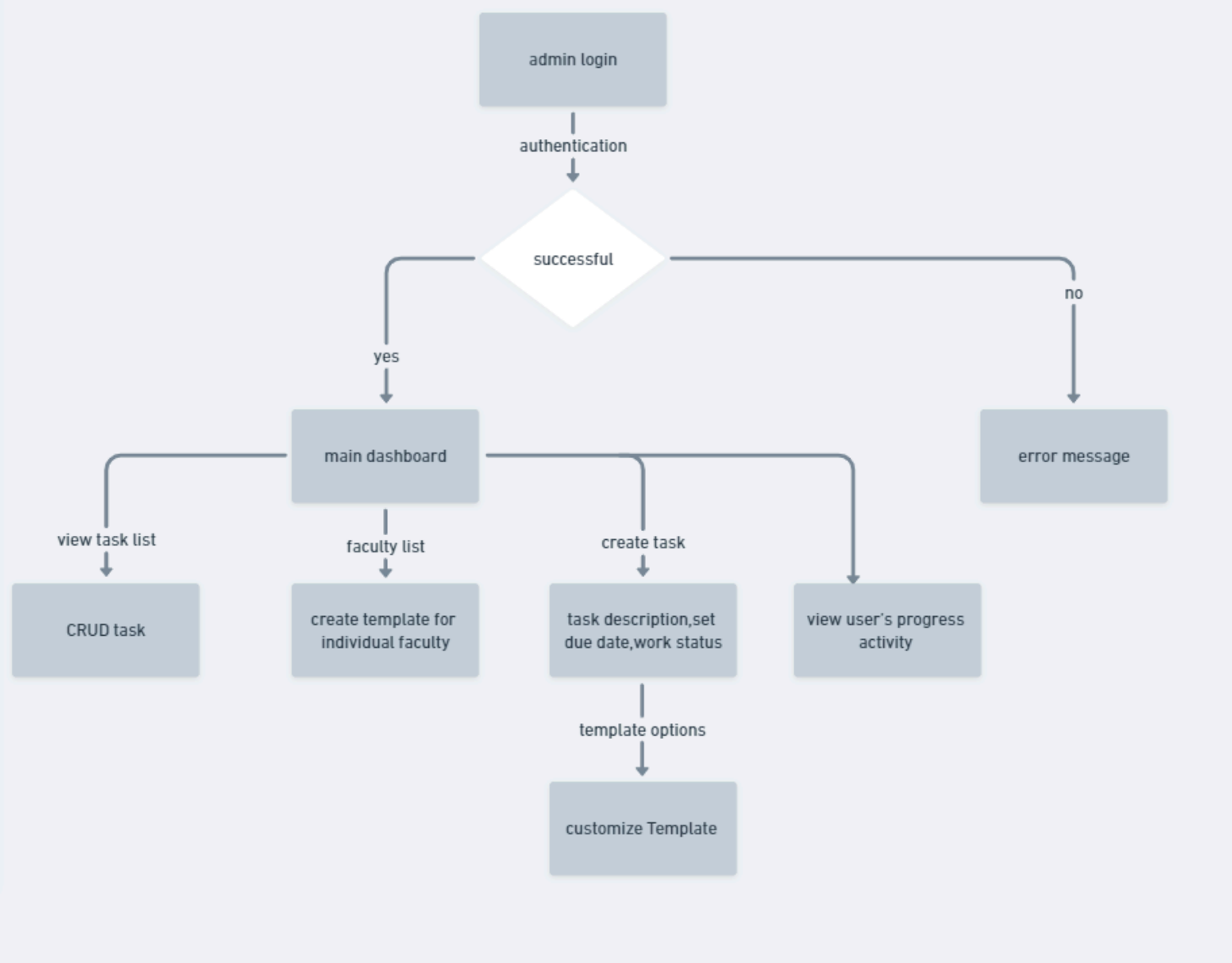
The role of a user in task management is to actively participate in the completion of assigned tasks within a project or workflow.

Flow chart

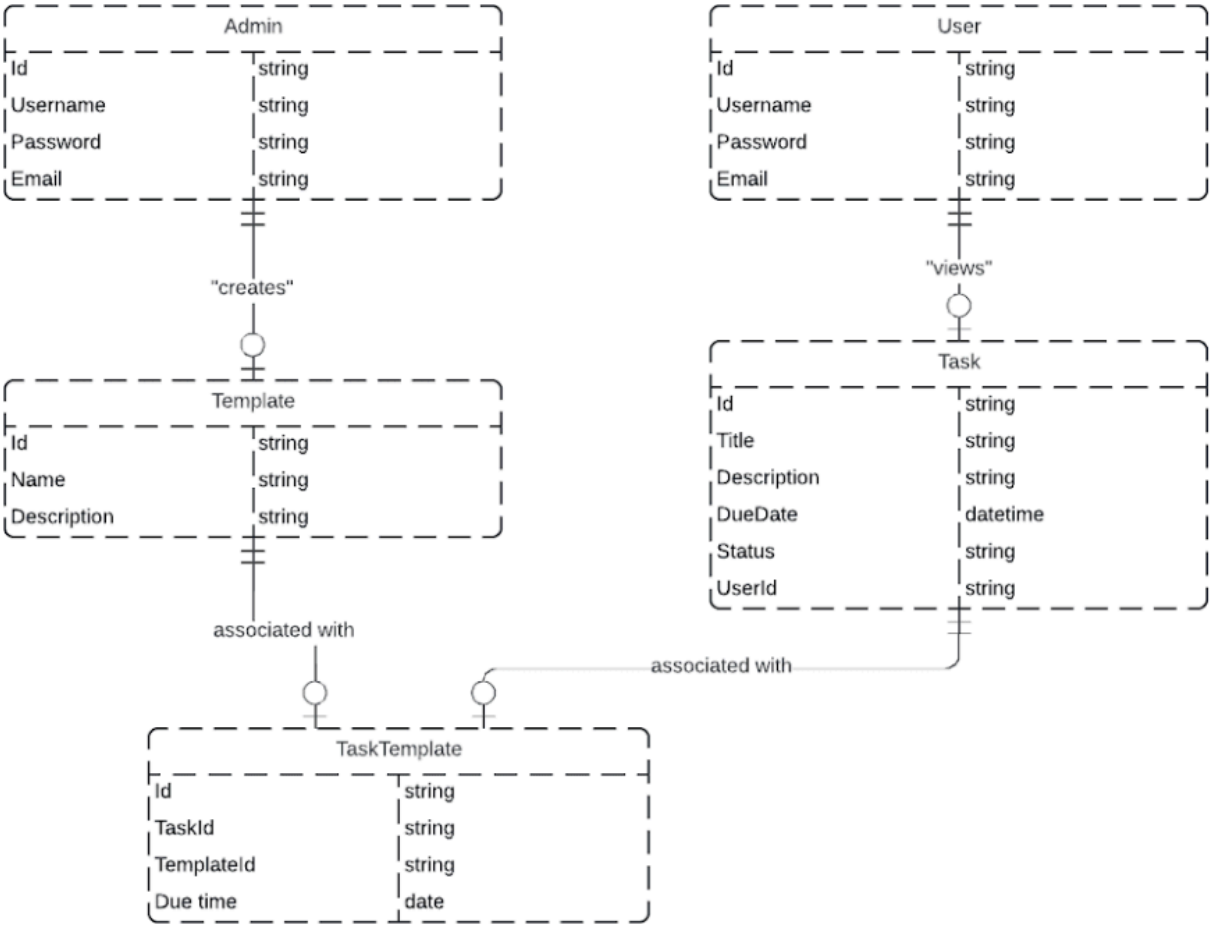
User Side:



Admin Side:


admin login
authentication
successful
yes
no
main dashboard
error message
view task list
faculty list
create task
CRUD task
create template for individual faculty
task description,set due date,work status
view user's progress activity
template options
customize Template

ER-Diagram


Admin
Id string
Username string
Password string
Email string
"creates"
Template
Id string
Name string
Description string
associated with
User
Id string
Username string
Password string
Email string
"views"
Task
Id string
Title string
Description string
DueDate datetime
Status string
UserId string
associated with
TaskTemplate
Id string
TaskId string
TemplateId string
Due time date