Software Requirement Specification for Task Portal

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Problem Statement	Template Task

Technical Components

Component	Tech Stack
Backend	Spring Boot
Frontend	Angular
Database	MySQL
API	RESTful services

1. Introduction

1.1. Purpose

This document aims to provide a thorough overview of the Task Portal. The document will elucidate the objectives and characteristics of the system, as well as its interfaces, functionalities, operational limitations, and response to external stimuli.

1.2. Scope of Project

- Using this software system, administrators will be able to give projects to faculty members and track their progress, acting as a portal for task management within the organization. From an administrative standpoint, this system will offer a feature-rich dashboard for faculty management and task supervision.
- A Tasks can be created and assigned to faculties by administrators. Teachers have access to their assigned tasks, task status updates, and feedback forms.

2. System Overview

2.1. Users

1. Admins:

- Review and manage task assignments.
- Create and assign tasks to faculties.
- Access a comprehensive dashboard for task and faculty management.

2. Faculties:

- View assigned tasks.
- Update task proof and provide feedback.

2.2. Features

1. Login and Registration:

Admins and faculties can log in with their existing account.

2. Task Management:

• Admin Dashboard:

- o Admins can view a summary of all tasks and faculty details.
- Admins can open a form to add tasks, entering required fields such as faculty name, dept, task
 title, description, due date, and assign tasks to specific faculties.
- Admins can view and manage faculty details, including contact information and task assignments.

Task Creation:

- Admins can create tasks by filling out a form with necessary details (task id, task description, email, due date, assigned faculty).
- Tasks are assigned to faculties can view through the portal.

3. Faculty Details:

Admins can view the faculty details through the faculty portal for the detail information about the faculty for creating a task.

4. Faculty Dashboard:

- Faculties can log in to view their assigned tasks.
- Faculties can see detailed descriptions of each task, including title, description, due date, and status.
- Faculties can update the proof of their tasks and provide feedback or comments.

3. System Requirements Specification

3.1. Functional Requirements

User Management

Admin Login:

- o Admins can log in.
- \circ Admins have access to an analytical dashboard and dedicated features.

• Faculty Login/Register:

- o Faculties can log in.
- o Faculties have access to view and manage their assigned tasks.

Task Management

• Task Creation and Assignment:

- Admins can create tasks by filling out a form with appropriate details:
 - Id
 - Faculty name
 - Department
 - Task title
 - Task description
 - Duration
 - Category
 - Create task
- Tasks are assigned to their id through the portal.

• Task View and Update:

- Faculties can view their assigned tasks.
- $\circ\;$ Faculties can update the status of their tasks and provide feedback.

Task Details

• Task Form Fields:

- Task Title
- Task Description
- Duration
- Assigned Faculty

• Task Status:

- Faculties can update the current status of their tasks.
- Faculties can provide comments or feedback on their tasks.

Admin Dashboard

• View Task Summary:

- o Admins can view a list of all tasks.
- Tasks can be filtered by status (verified).

• View Faculty Details:

 Admins can view details of each faculty member, including contact information and assigned tasks.

Manage Tasks:

- Admins can approve or reject task updates with suitable remarks.
- Admins can schedule meetings for tasks if needed.

Analytics Dashboard

• Task Analytics:

- o Admins can view the number of tasks by their status.
- Admins can view the number of tasks assigned to each faculty.
- $\circ\;\;$ Admins can view the overall progress of tasks.

3.2. Non-Functional Requirements

Performance

- The system must respond to user actions within 2 seconds to ensure efficient usability.
- The system must handle a concurrent user load of at least 100 users without significant performance degradation.

Security

- User data must be encrypted during transmission and storage.
- Access to sensitive functionalities should be restricted to authorized admin users through secure authentication mechanisms.

Usability

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

Reliability

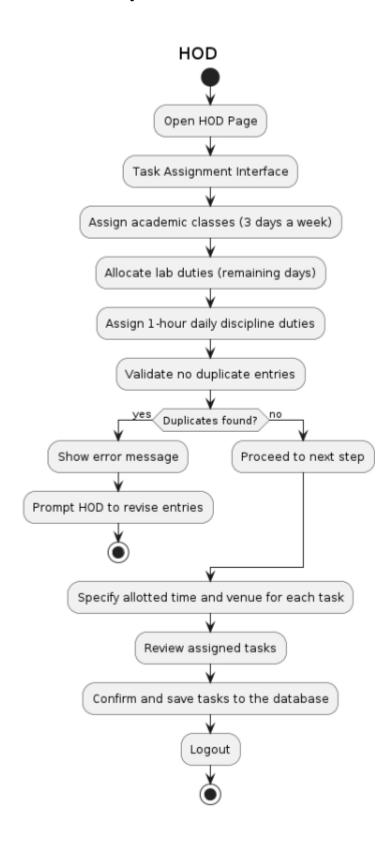
- The system should be available 24/7 with minimal downtime.
- A backup and recovery mechanism should be in place to prevent data loss in case of system failures or crashes.

Scalability

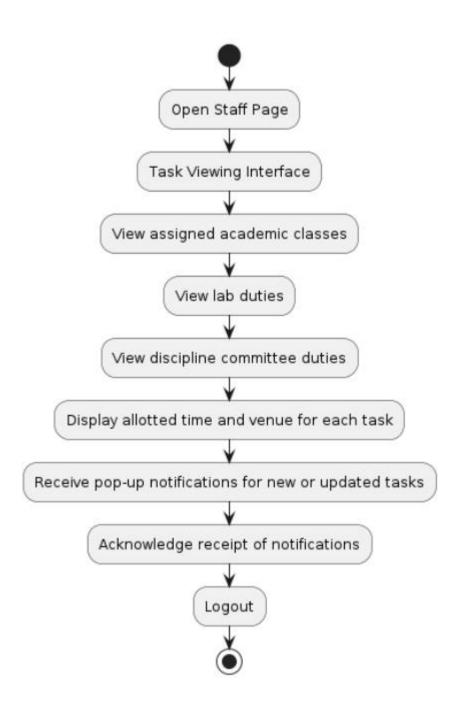
- The system should be designed to accommodate an increasing number of users and data volume over time.
- The system should be scalable to support additional features and functionalities as per future requirements.

5. FLOWCHART:

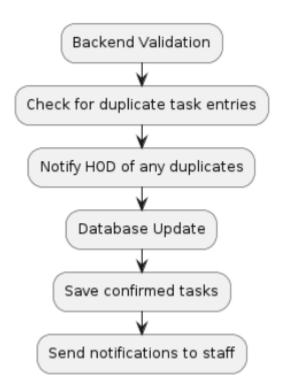
5.1 Admin's Analytical Dashboard:



5.2 Staff Analytical Dashboard:



5.3 workflow:



5.4 ER Diagram:

