

Software Requirement Specification for Repeat Task

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Project ID	6
Problem Statement	Repeat Task

Technical Components

Front End	Angular
Back End	Node.js with Express.js
Database	MongoDB
API	REST Ful API / GraphQL APIs

1. Introduction

1.1. Purpose:

To ensure that essential tasks are completed on a regular basis, repeat tasks are scheduled to recur daily, weekly, or monthly. This helps in maintaining consistency, improving productivity, and ensuring that no critical activities are overlooked or forgotten over time.

1.2 Scope of Project :

Course Management : The project will include a course management module to assist educators and trainers in organizing and managing courses. Features will include scheduling classes, tracking attendance, managing assignments, and providing resources. This module will help streamline educational processes and improve the learning experience for students.

User Roles and Permissions : It includes defining and implementing user roles (Admin, Faculty) with specific permissions change to their responsibilities within the system.

Content Verification and Approval : A robust content verification and approval workflow will be implemented, allowing users to submit tasks or documents for review. Approvers can provide feedback, request changes, and ultimately approve content, ensuring that all tasks and materials meet required standards and are accurate before finalization.

Integration with External Platforms : The system will integrate with popular external platforms such as Google Calendar, Microsoft Outlook, Slack, and Trello. This will allow users to sync their tasks, receive notifications, and collaborate seamlessly across different tools, enhancing overall productivity and connectivity.

2. System Overview

2.1 Users :

Faculty :

Faculty members play a vital role in the educational process by diligently uploading lecture materials and videos, ensuring timely delivery of course content to students. They actively engage with administrative feedback, make necessary corrections, and meet submission deadlines punctually. This active involvement enhances the quality of educational resources, enriching the learning experience for students. Faculty members receive reminders about

upcoming due dates and access reports detailing points earned for their submissions, enhancing transparency and accountability in the academic process. They also participate in faculty meetings, contribute to curriculum development, and mentor students, fostering a supportive and effective learning environment.

Admin :

Admins oversee the entire process, mapping faculty to courses and specifying upload requirements. They verify submissions, provide feedback to faculty, and manage the final approval process. Admins ensure compliance with standards, maintain database integrity, and update wiki pages with generated code, facilitating seamless access to educational materials for students. Additionally, they coordinate with other departments to streamline the workflow, monitor the system for any issues, and implement updates or improvements. Admins also generate and analyze reports to evaluate system performance and identify areas for enhancement.

2.2 Features:

Login and Registration: Faculties can log in using their BITSathy credentials or register for an account by providing their name, email, department, etc.

Subjects Assigned: Faculties can view their assigned subjects and due dates, and submit lecture videos and materials for admin approval. Submitted materials are sent to admins for review.

Submission Status: Faculties can check if their submissions are pending, approved, or rejected, and view their submission history to track past submissions and feedback.

Report of Submissions: Faculties can access detailed reports of their submissions, including dates, status, and points for timely submissions, helping them track performance and deadlines.

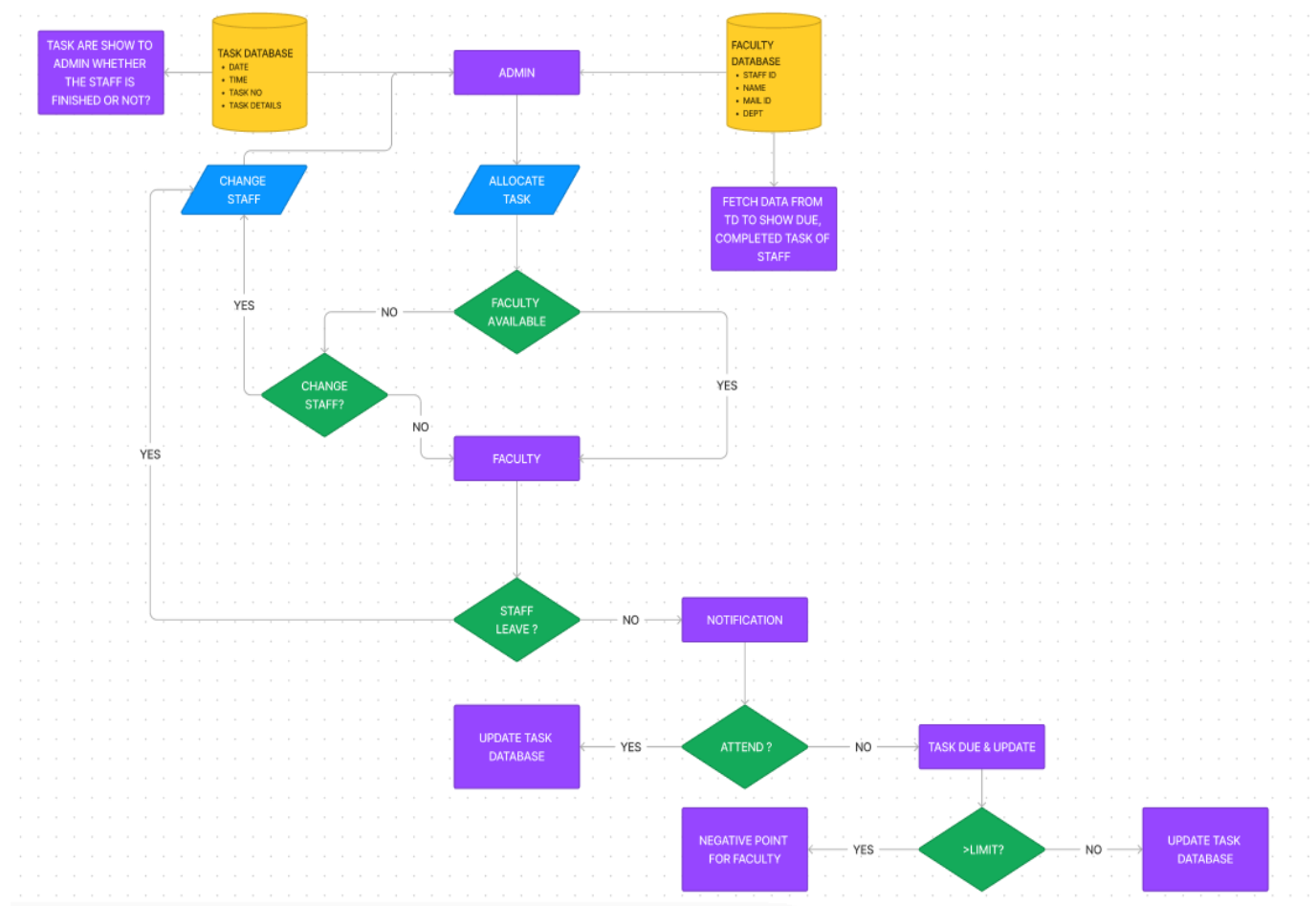
Admin Access: Admins can view all submitted materials, provide feedback, approve or reject submissions with remarks, and award points for timely and quality submissions.

Repeat Task Management: Admins and faculties can create tasks that recur daily, weekly, or monthly. Faculties receive notifications for upcoming deadlines, and the system schedules recurring tasks automatically. Users can edit tasks and track their progress, with detailed reports available to monitor performance over time.

Admin's Analytical Dashboard:

Admins have access to an analytical dashboard that provides insights into faculty performance and submission statistics. Key metrics include the number of submissions, approval rates, average submission times, and points awarded. The dashboard features visualizations such as graphs and charts to help admins quickly assess trends and identify areas for improvement. Admins can filter data by faculty, department, or date range to generate customized reports, enhancing oversight and decision-making.

Flow Chart :



3.System Requirements Specification:

3.1 Functional Requirements:

User Management:

- Faculties can log in and submit assigned materials.
- Admins have access control with an analytical dashboard and dedicated features.

Submission of Materials:

- Faculties can view and manage their submissions, which include lecture videos and lecture materials.

Submission Status:

- Faculties can check the current status of their submissions (pending, approved, or rejected).
- Remarks for rejected submissions are displayed.
- Faculties can see the points awarded for their submissions.

Admin Dashboard:

- Admins can view a list of all submitted materials, filterable by category (year, subject, semester).
- Admins can view details of each submission, approve or reject with remarks, and schedule meetings for accepted submissions.

Analytics Dashboard:

- Admins can view submission statistics, including the number of submissions by category and requests based on the category.
- The dashboard provides visualizations to help assess trends and performance.

Additional Specifications:

- Faculties receive emails regarding required materials and subjects allocated.
- Faculties upload lecture videos and materials.
- Admins verify videos and provide corrections.
- After corrections, admins approve the videos and materials.
- Approved videos are uploaded to PeerTube, and materials are uploaded to the wiki page.
- HTML markup code for the wiki page is generated and updated by admins.

Faculty Requirements:

- Receive email notifications about required materials.
- Upload materials and make corrections based on admin feedback.
- Meet submission due dates to avoid negative points.
- Access reports on submissions and points awarded.

Admin Requirements:

- Map faculties to courses and specify material and video requirements.
- Verify if requirements are met; if satisfied, approve the submission; if not, reject with remarks.
- Manage the final HTML markup code for the wiki page.
- Access reports on faculty submissions and performance.

Uploading Details:

- Videos are uploaded to PeerTube.
- Materials are uploaded as PDFs directly to the wiki page.

ER Diagram :

