

**BANNARI AMMAN INSTITUTE OF TECHNOLOGY**

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ROLL NO	7376222CT102
PROJECT ID	05
SEAT NO	198
MODULE NAME	BASIC TASK OPERATION

Problem Statement

Develop a system where the Head of the Department (HoD) can assign unique tasks to staff members with specified start and completion dates. Only the HoD can view all tasks, while each staff member can only see their own assigned task. The system ensures efficient task management, role-based access, and timely project completion within the department.

Challenges

Manual Points Allocation: Admins spend excessive time manually assigning tasks based on event participation and achievements. This manual process delays accurate task assignment and hinders overall efficiency.

No Edit Feature: Participants cannot correct errors in their task submissions. This inability to make corrections leads to discrepancies and incomplete records, impacting fairness in task distribution.

Limited Feedback: There's inadequate communication regarding the approval or rejection of task submissions. This lack of feedback leaves participants without timely notifications or explanations for improvement.

Technical Components

Component	Tech stack
Frontend	React js
Backend	Java with spring boot
Database	MySql
API	RESTful API

Implementation Timeline

Phase	Deadline	Status	Notes
Stage 1	22/07/2024	Under review ▾	Planning and Requirement Gathering
Stage 2		Not started ▾	Design and UI/UX Prototyping
Stage 3		Not started ▾	Backend Development
Stage 4		Not started ▾	Database Design and Implementation
Stage 5		Not started ▾	Integration and Testing
Stage 6		Not started ▾	Deployment

Project Overview

Purpose

Create a task management system to streamline task assignment, event uploading, follow-up, and task approval, enhancing efficiency and transparency.

Scope

Include user authentication, event management, task submission, approval workflow, task allocation, and report generation to simplify event documentation for users and administrators.

Dependencies

- Integrate a secure login system with BIT SATHY mail or any other email system, involving the implementation of various authentication and security protocols.
- Ensure internet connectivity for system access.

Database Management System (DBMS)

Use a robust DBMS for efficient storage and management of event data, user information, task submissions, and task details. Allow users to view and provide feedback in case of any changes, while administrators must have access to view, upload, or edit specific data.

User personas

1. Head of the Department (HoD)

- Include Name, Age and Designation.

Goals:

- Efficiently assign and manage tasks for all staff members.
- Monitor task progress and ensure timely completion.
- Maintain the privacy and security of task information. **Challenges:**

- Balancing administrative duties with departmental oversight.
- Ensuring tasks are assigned uniquely and fairly.
- Keeping track of multiple tasks and deadlines. **Tech Savvy:** High

Preferred Device: Desktop computer

2. Senior Staff Member

- Include Name, Age and Designation.

Goals:

- Complete assigned tasks within the given timeframe.
- Access task details easily and submit progress updates.
- Receive timely feedback and support from the HoD. **Challenges:**
- Managing multiple responsibilities including teaching and research.
- Ensuring task submissions are accurate and up to date. **Tech Savvy:** Medium

Preferred Device: Laptop

3. Junior Staff Member

- Include Name, Age and Designation.

Goals:

- Understand and complete tasks assigned by the HoD.
- Improve performance through feedback and support.
- Balance task responsibilities with professional development. **Challenges:**
- Learning to manage time effectively for task completion.
- Seeking guidance and clarification on tasks when needed. **Tech Savvy:** Medium

Preferred Device: Smartphone and Laptop

4. Administrative Assistant

- Include Name, Age and Designation.

Goals:

- Assist the HoD in monitoring task progress.
 - Ensure all task-related data is accurately recorded and updated.
 - Facilitate communication between the HoD and staff members. **Challenges:**
 - Managing and organizing large amounts of task data.
 - Coordinating effectively with both the HoD and staff members. **Tech Savvy:** High
- Preferred Device:** Desktop computer and Tablet

Functional requirements

Task Assignment

1. **Task Creation:** The system should allow the HoD to create new tasks with details such as title, description, start date, and completion date.
2. **Unique Task Assignment:** The system must ensure that each task is uniquely assigned to individual staff members.
3. **Task Editing:** The HoD should be able to edit task details before they are assigned to staff members.

User Authentication

4. **Secure Login:** The system should provide a secure login feature using BITSATHY mail or any other email system.
5. **Role-Based Access:** The system should differentiate between roles (HoD, Senior Staff, Junior Staff, Administrative Assistant) and grant access accordingly.

Task Management

6. **Task Viewing:** Staff members should be able to view only their assigned tasks.
7. **Task Status Updates:** Staff members should be able to update the status of their tasks (e.g., in-progress, completed).
8. **Task Feedback:** The system should allow staff members to submit feedback or request clarification on their tasks.

Approval Workflow

9. **Task Approval:** The HoD should be able to approve or reject tasks based on submission and progress updates.
10. **Notification System:** The system should notify staff members of task assignments, updates, and approvals/rejections.

Event Management

11. **Event Uploading:** The system should allow the HoD to upload event details relevant to tasks.
12. **Event Viewing:** Staff members should be able to view events related to their tasks.

Reporting and Analytics

13. **Report Generation:** The system should generate reports on task assignments, progress, and completions.
14. **Task Summary:** The system should provide a summary of tasks for the HoD, including pending, in-progress, and completed tasks.

Database Management

15. **Data Storage:** The system should securely store all task-related data, including task details, user information, and status updates.

- 16. **Data Editing:** The HoD and Administrative Assistant should be able to view, upload, and edit specific data as needed.
- 17. **Audit Trail:** The system should maintain a log of all task-related activities for accountability and transparency.

User Interface

- 18. **Dashboard:** The system should provide a user-friendly dashboard for the HoD to manage tasks and for staff members to view their tasks.
- 19. **Mobile Compatibility:** The system should be accessible on various devices, including desktops, laptops, tablets, and smartphones.

Integration and Security

- 20. **Email Integration:** The system should integrate with the email system for notifications and user authentication.
- 21. **Data Security:** The system should implement security protocols to protect sensitive data and ensure privacy.

FLOWCHART

