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Project ID: 19

Project Title: FACULTY WORK LOG

TECHNICAL COMPONENTS:

Component	Tech Stack
Frontend	HTML,CSS,JS
Backend	Python
Database	MySQL
API	OpenAPI

PROBLEM STATEMENT:

The current system for managing and updating faculty work faces several challenges, including:

1. **Lack of a Centralized System:** There is no unified platform for faculty to manage their schedules, tasks, and communications, leading to inefficiencies and potential conflicts.
2. **Manual Task Allocation:** Assigning tasks to faculty members is a manual process prone to errors, resulting in confusion and dissatisfaction.

3. **Communication Gaps:** Important updates such as changes in schedules, tasks, or meetings are communicated inconsistently, leading to confusion and inconvenience.

4. **Administrative Burden:** Managing faculty schedules, task allocations, attendance records, and communication requires significant administrative effort, impacting staff efficiency.

PROJECT FLOW:

Purpose:

To develop a comprehensive system that efficiently handles faculty task allocation, schedule management, attendance tracking, and communication, enhancing the overall work management experience for faculty members and streamlining administrative tasks.

Scope:

This system includes user registration, login authentication, dashboard management, task assignment functionality, attendance tracking, and email/SMS notifications for updates such as schedule changes and task allocations. It caters to both faculty members and administrators, providing them with relevant features to manage work effectively.

Business Context:

The faculty work management system aims to optimize task allocation and communication within the educational institution, reducing administrative burden and ensuring a seamless experience for faculty members. Primary stakeholders include faculty members, administrative staff, and the IT department.

Consideration:

- **User Registration:** Users register their details to access the system.

- **Three Types of Logins:** Admin/ Super Admin, Head and Faculty.
- **Communication Channels:** Email and SMS.
- **Role-Based Access:** Super Admin has access to both faculty and head functionalities.
- **Activity Tracking:** Faculty activities are recorded and updated by the respective users and admins.

Dependencies:

- **Integration with Google OAuth:** For user authentication.
- **Reliable performance and availability of the MySQL database.**
- **OpenAPI:** For seamless API integration.

User personas:

- **Faculty:** Requires access to the dashboard, task management, and activity tracking.
- **Head:** Manages dashboard details, assigns tasks, and monitors faculty activities.
- **Admin/Super Admin:** Has overarching access to both head and faculty functionalities, ensuring smooth operation and communication.

User Stories:

- **As a faculty member,** I want to easily update my tasks and activities, and receive updates via email/SMS.
- **As a Head,** I need to efficiently manage and monitor faculty activities, assign tasks, and communicate important updates.

- **As an admin/ super admin,** I need to oversee both faculty and head functionalities, ensuring smooth operation and efficient communication.

Functional Requirements:

1. User Registration:
   - Faculty members register their details (name, email, department, etc.) for access.
   - Data is stored securely in the MySQL database.
2. User Authentication:
   - Secure login using registered credentials (faculty or head or admin/super admin).
3. Dashboard Management:
   - Displays task details, schedule information, and other relevant data.
   - Provides separate views for faculty, head and admin/super admin.
4. Task Management:
   - Admin assigns tasks to faculty members based on availability and expertise.
   - Faculty members can view and manage their tasks.
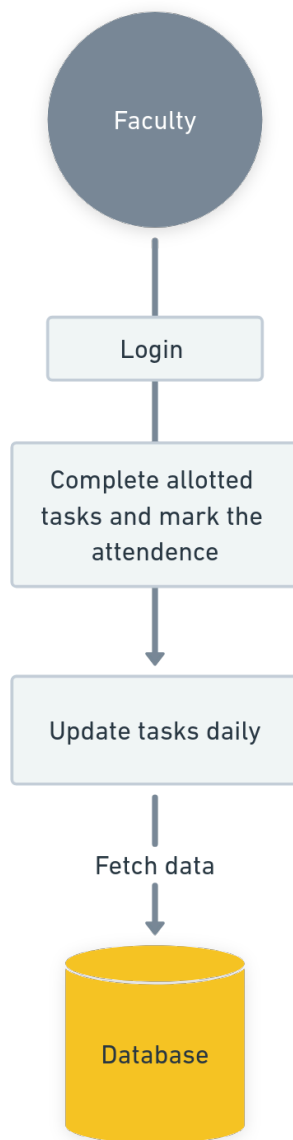4. Attendance Tracking:
   - Faculty members mark their attendance for classes and meetings.
   - Attendance status is recorded and accessible by head.
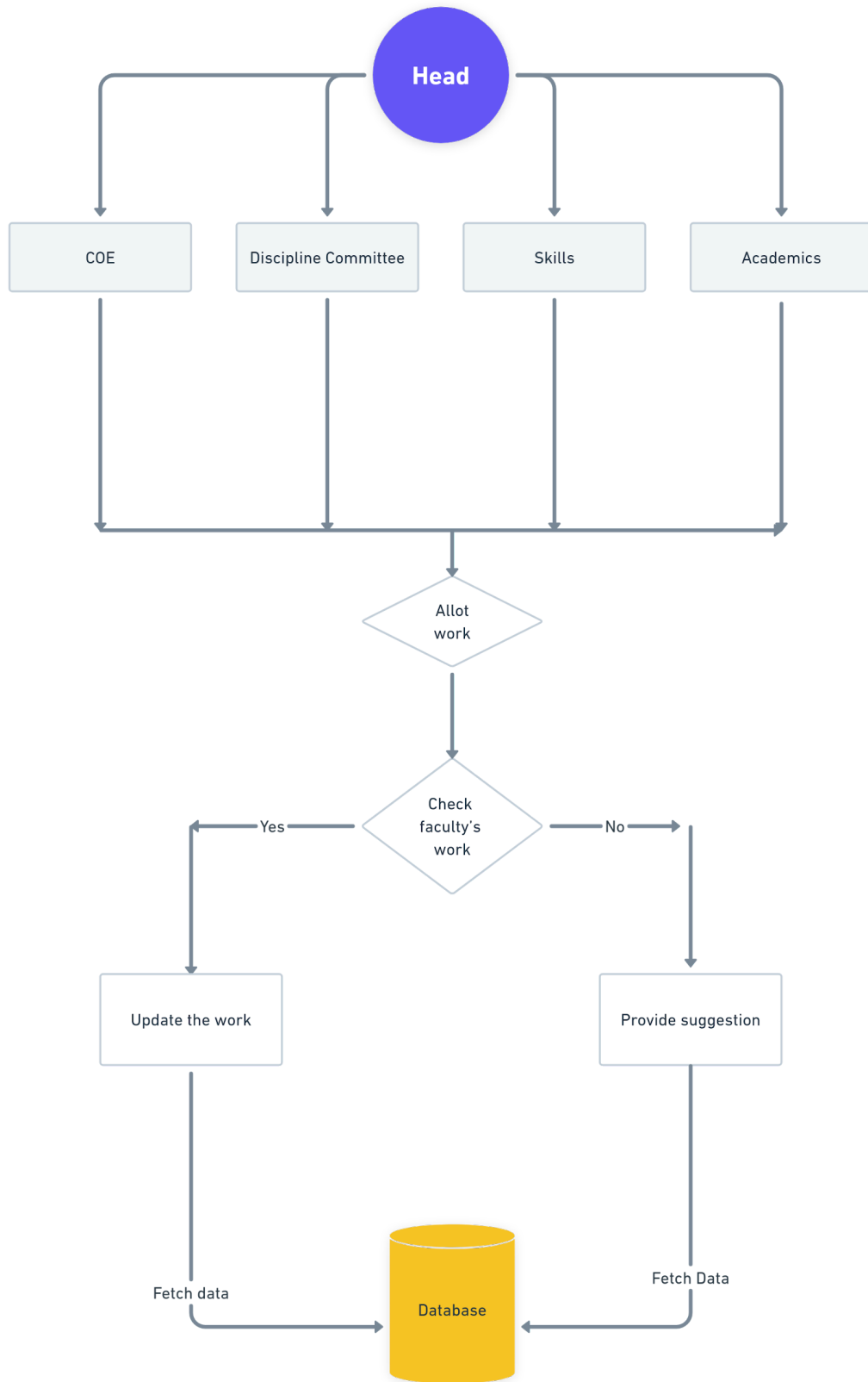5. Communication:
   - Email/SMS notifications sent to users for important updates and reminders.
   - Head and admin/super admin can communicate changes and updates to faculty.

FLOWCHART:

Faculty:

```
              ( Faculty )
                  |
                  v
              [ Login ]
                  |
                  v
    [ Complete allotted
      tasks and mark the
        attendence ]
                  |
                  v
    [ Update tasks daily ]
                  |
              Fetch data
                  |
                  v
            [ Database ]
```

Head:

Admin/ Super Admin: