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Project ID : 35

**Project title : DC ENQUIRY FOLLOW UP
AND NORMAL DC RELATED
QUERIES**

Technical Components:

COMPONENT	TECH STACK
FRONT END	Angular.js
BACK END	Node.js , Express.js
DATABASE	MongoDB
API	REST Ful API / GraphQL APIs

MongoDB: As the database management system, MongoDB provides a flexible and scalable solution for storing and retrieving user data, such as profiles, posts, connections, and job listings. Its document-oriented structure allows for efficient storage and querying of complex data structures.

Express.js: This web application framework for Node.js serves as the back end server, handling HTTP requests and responses. Express.js is used to build RESTful APIs for various functionalities like user authentication, CRUD operations on data, and integrating with third-party services (e.g., Google Auth).

Angular.js: AngularJS is a JavaScript framework developed by Google for building dynamic web applications. Launched in 2010, it utilizes the Model-View-Controller (MVC) architecture to enhance development efficiency by providing features like two-way data binding, dependency injection, and custom directives. These capabilities streamline data synchronization and code management, though AngularJS has largely been succeeded by Angular (2+), which offers enhanced performance and features.

Node.js: This JavaScript runtime environment powers the back end server and provides an efficient event-driven architecture for handling concurrent connections. Node.js is used to run the Express.js server and handle real-time operations like websocket communication for instant messaging.

Implementation Timeline

Phase	Deadline	Status	Notes
Stage 1	01-08-2024	Approved	Planning and Requirement Gathering
Stage 2	-	In progress	Design and Prototyping
Stage 3	-		DataBase Designing
Stage 4	-		Back end implementation
Stage 5	-		Testing & implementation

Phase Notes

- Stage 1 - Planning and Requirement gathering
- Stage 2 - Design and Prototyping
- Stage 3 - DB Designing
- Stage 4 - Back end Implementation
- Stage 5 - Testing & Implementation

PROBLEM STATEMENT:

The goal is to create a web application with the MEAN stack (MongoDB, Express.js, Angular, Node.js) for handling Disciplinary Committee (DC) inquiries and follow-ups. Staff members log in via email during Phase 1 and submit incident reports that include incident data (location, date, time, hosteller/day scholar, and type of incident) and student details (roll number, name, department, year, mentor). The report is emailed to the administrator upon submission. Phase 2: The administrator evaluates the form and determines if further information is required. If so, Phase 3 takes place after the administrator checks the information, logs the attendance %, chooses the type of action (fine, warning, suspension, long leave), verifies the nature of the occurrence, and creates an Excel or PDF report. A copy of the final report is forwarded to the mentor along with submission. An admin reminder pop-up alerts the administrator to enable unblocking when the student's suspension or extended leave expires.

PROJECT-FLOW:

Purpose:

The reason for this task is to foster a far reaching web application that works with the administration of Disciplinary Panel (DC) enquiries and subsequent meet-ups inside an instructive organization. By utilizing the MEAN stack, the framework expects to smooth out the most common way of recording, looking into, and following up on disciplinary episodes, guaranteeing productive correspondence between staff, organization, and coaches.

Scope:

The extent of this task envelops the improvement of an electronic stage that upholds client validation for staff individuals, assortment and accommodation of occurrence reports, regulatory survey and independent direction, and the age of reports. The framework will likewise incorporate elements for telling guides and giving suggestions to regulatory activities connected with suspensions and long leaves.

Business Context:

In an instructive setting, keeping up with discipline is significant for establishing a helpful learning climate. This framework tends to the requirement for a coordinated and effective cycle to deal with disciplinary issues. Via mechanizing the enquiry and follow-up process, the foundation can guarantee that occurrences are reported, evaluated, and settled sooner rather than later, hence further developing in general discipline the executives.

Consideration:

While fostering this framework, contemplations incorporate guaranteeing information protection and security, easy to use interface plan, and joining with existing understudy data sets. Moreover, the framework should deal with various sorts of episodes and activities, oblige shifting degrees of access for various clients, and give dependable email warnings to administrators and guides.

Dependencies:

The effective execution of this venture relies upon a few elements, including the accessibility of precise understudy information bases, dependable email administrations for warnings, and secure verification instruments. Furthermore, the improvement group should have skill in the MEAN stack and a careful comprehension of the foundation's disciplinary systems

User personas:

a) Faculty: Faculty members are responsible for logging in to the system, submitting detailed incident reports, and providing necessary student information. They need an intuitive interface to quickly and accurately document incidents.

b) Admin Staff: Admin staff review submitted incident reports, decide on the necessity of an enquiry, and take appropriate actions. They require access to comprehensive reports, tools for generating official documents, and reminders for follow-up actions.

User Stories:

- As an employee, I need to sign in to the framework utilizing my email so I can submit episode reports.
- As an employee, I need to give point by point data about the understudy and the occurrence so that the administrator can survey it precisely.
- As an administrator staff member, I need to audit occurrence reports presented by personnel with the goal that I can settle on the essential activities.
- As an administrator staff member, I need to produce and submit official reports in PDF or Succeed design so I can archive the moves made.
- As an administrator staff member, I need to get updates for follow-up activities connected with suspensions or long leaves so I can oversee understudy situations.

Functional Requirements:

1)Secure Login Instrument:

The framework will give a safe login component to employees utilizing their email locations to guarantee that main approved faculty can get to and submit occurrence reports. And in the first phase itself we give login for both staff and admin.

2)Incident Report Accommodation:

- The framework will permit employees to submit point by point occurrence reports, including the accompanying understudy data:
 - a)Roll Number
 - b)Name
 - c)Department
 - d)Year of Study
 - e)Mentor
- The framework will catch episode particulars, for example,

a)Place

b)Date

c)Time

- Whether the understudy is a hosteller or day researcher
- The framework will record the sort of episode to classify the idea of the revealed occasion.

3)Email Warning to Administrator:

Endless supply of an episode report, the framework will naturally email the subtleties to the administrator to guarantee brief audit and activity.

4)Admin Audit Point of interaction:

- The framework will give a connection point to administrator staff to survey episode reports presented by employees.
- The framework will empower administrator staff to settle on the need of an enquiry, working with a smoothed out dynamic cycle.

5)Attendance and Activity Recording:

- The framework will permit administrator staff to record the understudy's participation rate, giving extra setting to disciplinary activities.
- The framework will offer choices for choosing proper activities in view of the episode, including:

a)Fine Sum: Administrator staff can enter the particular fine sum.

b)Severe Admonition: Administrator staff can give an admonition without money related punishments.

c)Suspension: Administrator staff can pick the beginning and end dates for the suspension time frame.

d)Long Leave: Administrator staff can choose the beginning and end dates for a supported long leave.

6)Report Age and Accommodation:

- The framework will produce reports in Succeed or PDF design, summing up the subtleties and moves made for every occurrence.
- The framework will permit administrator staff to present these reports, guaranteeing legitimate documentation and record-keeping.

7)Mentor Notices:

The framework will send notices to the understudy's guide in regards to the moves made, keeping them informed about the understudy's disciplinary status.

8)Follow-Up Updates:

The framework will give suggestions to the administrator to follow-up activities, especially for empowering unblocking after the suspension or long leave periods, guaranteeing that understudies' situations with supervision really.

FLOW CHART:

