SELF-INTENSIVE PROGRAMMING

2022-2026 BATCH

NAME: ABHIRAMI R K

ROLL NUMBER: 7376221CS102

SEAT NUMBER: 40

PROJECT ID: 40

DOMAIN: T&P

MODULE NAME: Group Discussion Slot Booking System

TECHNICAL COMPONENTS:

STACK: MERN

Component	Tech Stack
Frontend	React JS
Backend	Node.JS with Express.JS
Database	MongoDB
API	OpenAPI

MODULE DESCRIPTION:

The project aims to develop a user-friendly portal for scheduling and participating in group discussions (GD) and mock interviews. Students can easily book slots based on their availability, while the `admin can manage slot availability, faculty allocation, and venues. Notifications are sent via email once slots are enabled. The portal also offers Google authentication for seamless login. Overall, it streamlines the process, enhances communication, and optimizes resource allocation for smoother GD and mock interview sessions.

SCOPE:

Develop a portal facilitating the scheduling of group discussions & mock interviews, user & admin notifications via email, Google authentication, and slot management for venues, faculties, & dates.

FUNCTIONAL REQUIREMENTS:

- **User Registration and Authentication:** Allow users (Students) to register and log in securely using Google authentication.

- **Slot Booking:** Enable users to view available slots for group discussions and mock interviews, select preferred dates, times, and venues, and book slots accordingly.
- **Admin Panel:** Provide an admin panel with privileges to manage slot availability, faculties, venues, and user accounts. Admin should be able to enable/disable slots.
- **Email Notifications:** Automatically send email notifications to users and faculties upon slot booking and enablement, containing details of the scheduled session.
- **User Profile Management:** Enable users to manage their profiles, update personal information (Resume), and view their booked slots.

DEPENDENCIES:

Mongoose: Integration with Mongoose, an ODM (Object Data Modelling) library for MongoDB and Node.js, to simplify interactions with the MongoDB database and define data models.

JWT (JSON Web Tokens): Dependency on JWT for user authentication and authorization, ensuring secure access to the portal's resources.

Axios: Utilization of Axios, a promise-based HTTP client, to make asynchronous HTTP requests from the React.js frontend to the Express.js backend.

Node.js Package Manager (npm): To manage the installation of packages and dependencies.

NON-FUNCTIONAL REQUIREMENTS:

Performance: The portal should be responsive and performant, capable of handling multiple concurrent users without significant delays in loading or processing requests.

Scalability: The system should be designed to scale horizontally and vertically to accommodate a growing number of users, sessions, and data without compromising performance.

Reliability: The portal should be highly available and reliable, with minimal downtime and robust error handling to ensure uninterrupted access to scheduling and booking functionalities.

STAKEHOLDERS:

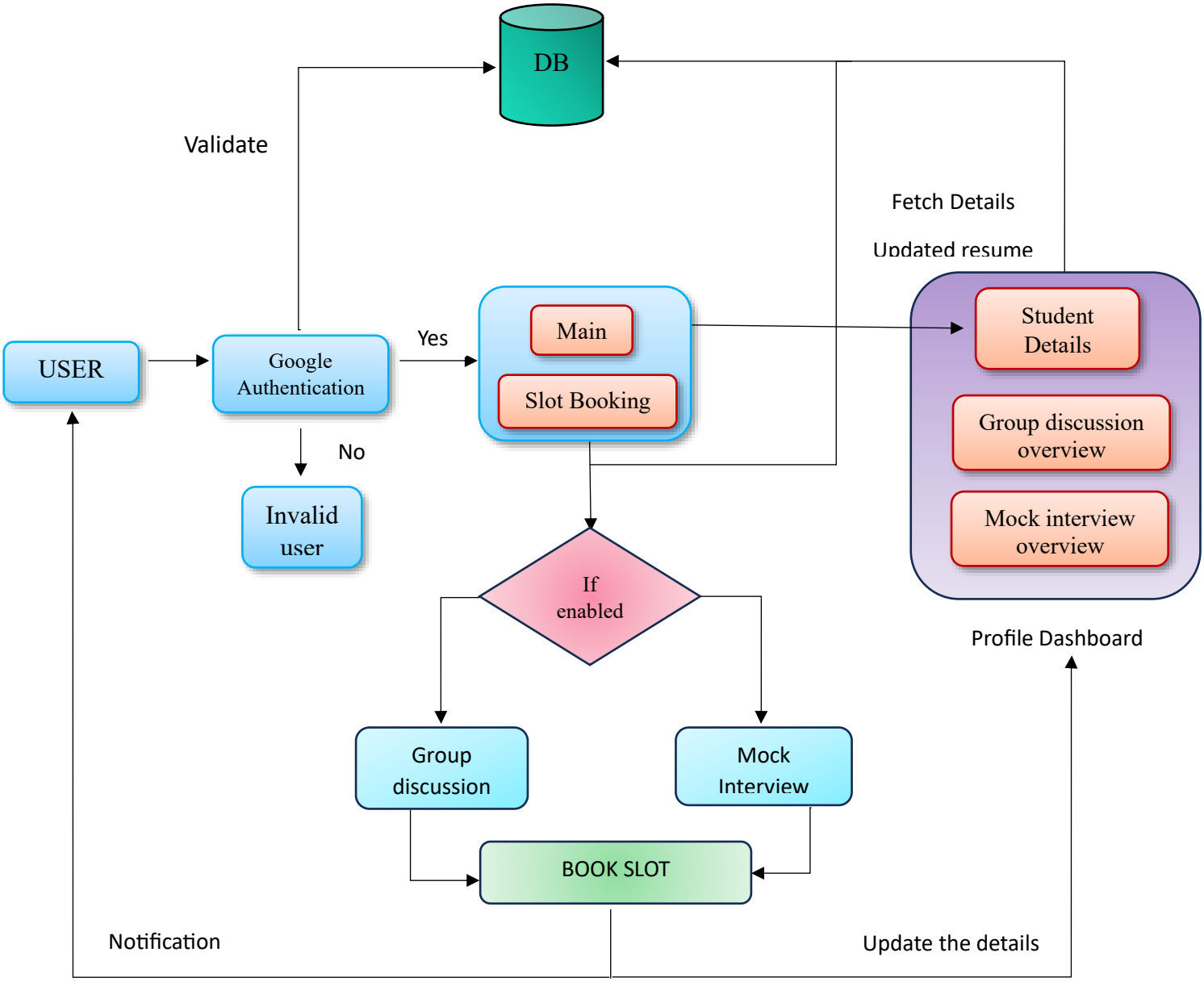
Users: Primary users schedule and book group discussions and mock interviews through the portal.

Admins: Admins manage slot availability, faculty assignments, venues, and system administration.

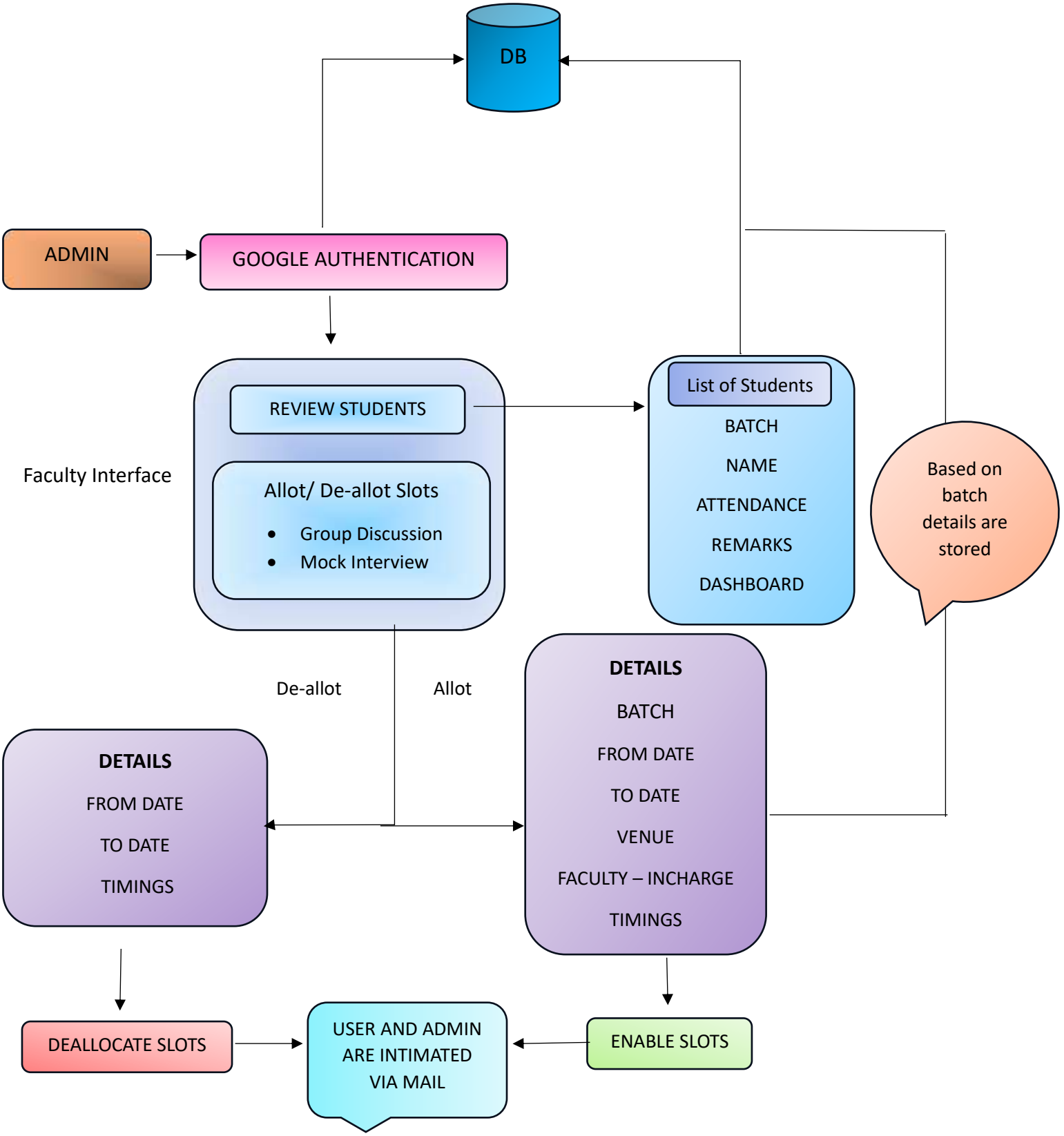
Faculties: Experts conducting discussions and interviews. They rely on the portal for scheduling and session notifications.

FLOW CHART:

USER INTERFACE

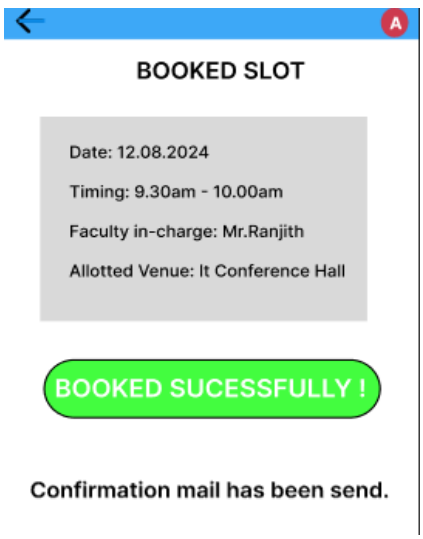


ADMIN INTERFACE

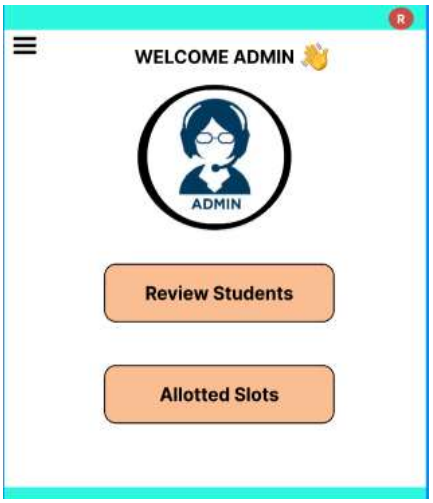


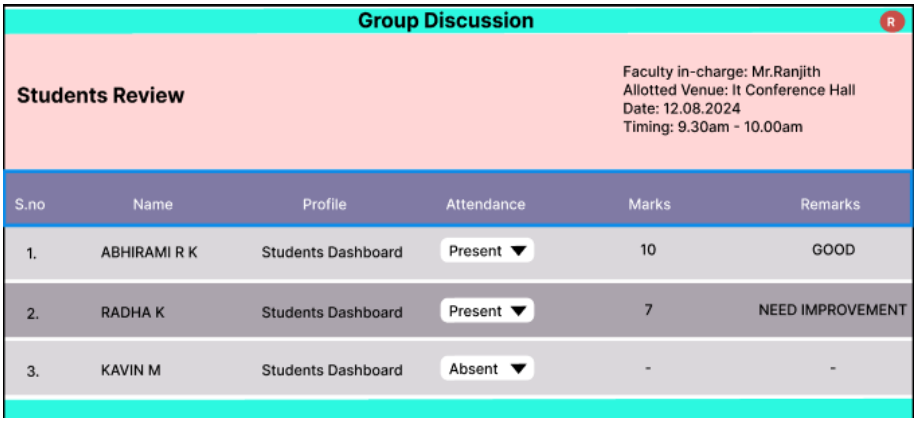
PROTOTYPE:

USERS

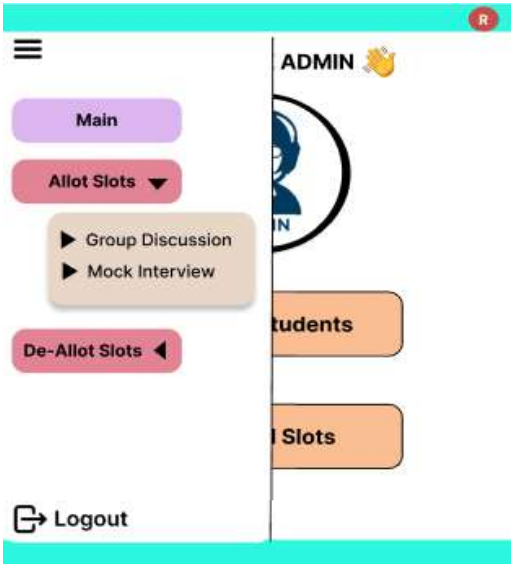


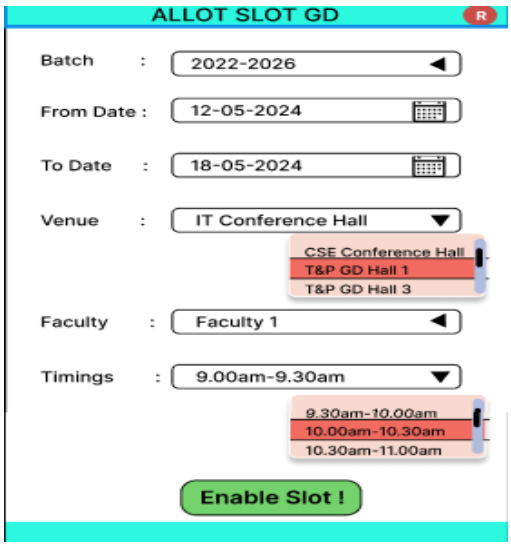
ADMINS

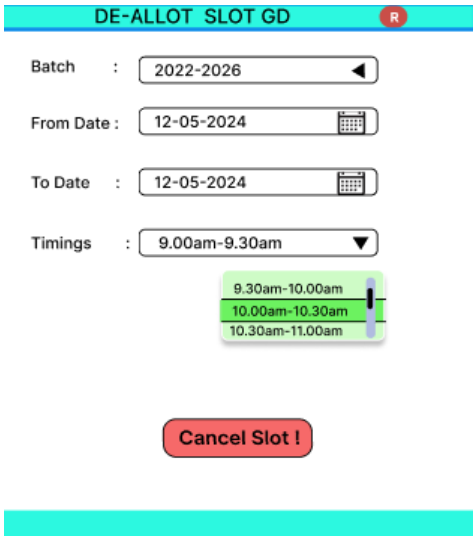

WELCOME ADMIN
ADMIN
Review Students
Allotted Slots


Group Discussion
Students Review
Faculty in-charge: Mr.Ranjith
Allotted Venue: It Conference Hall
Date: 12.08.2024
Timing: 9.30am - 10.00am
S.no Name Profile Attendance Marks Remarks
1. ABHIRAMI R K Students Dashboard Present 10 GOOD
2. RADHA K Students Dashboard Present 7 NEED IMPROVEMENT
3. KAVIN M Students Dashboard Absent - -


ALLOTTED SLOTS
Group Discussion
Batch : 2022-2026
From Date : 12-05-2024
To Date : 18-05-2024
Venue : IT Conference Hall, CSE Conference Hall
Faculty : Faculty 1, Faculty 2,Faculty 3
Timings : 9.00am-9.30am,10.00am-10.30am, 11.00am-11.30am,2.00pm-2.30pm


ADMIN
Main
Allot Slots
Group Discussion
Mock Interview
De-Allot Slots
Logout


ALLOT SLOT GD
Batch : 2022-2026
From Date : 12-05-2024
To Date : 18-05-2024
Venue : IT Conference Hall
CSE Conference Hall
T&P GD Hall 1
T&P GD Hall 3
Faculty : Faculty 1
Timings : 9.00am-9.30am
9.30am-10.00am
10.00am-10.30am
10.30am-11.00am
Enable Slot !


DE-ALLOT SLOT GD
Batch : 2022-2026
From Date : 12-05-2024
To Date : 12-05-2024
Timings : 9.00am-9.30am
9.30am-10.00am
10.00am-10.30am
10.30am-11.00am
Cancel Slot !