

PROJECT PLAN DOCUMENT

Project number	61
Project Title	Exam Time Table Generator
Document	Project Plan
Creation date	27 January 2025
Created By	Korlapati Keerthana
Client	Lalitha/Sriranjani , IT Office, IIIT Hyderabad

Brief problem statement

The task is to automate the process of generating optimized examination timetables for Mid-Semester and End-Semester exams for the Examination Cell of IIITH. The solution must involve designing an algorithm that extracts data such as course codes, student enrollments, faculty and examination rooms along with seating arrangements from a database to create a timetable that minimizes the number of students with consecutive exam slots, evenly distributes exams across specified slots, invigilation duties for each room, seating plan for students and provides statistical insights. The generated timetable should be available as both Excel and PDF documents.

Team Members

- **Raghav Grover:** Develop an algorithm to optimize the timetable by minimizing student conflicts and balancing exam distribution.
- **Korlapati Keerthana:** Build the backend to process the algorithm's output, integrate with the database, and serve the frontend.
- **Ahana Talukdar:** Ensure seamless integration of all modules (algorithm, backend, database, and frontend) into a cohesive system
- **Ananya Kasavajhala:** Create a user-friendly interface for Examination Cell staff to input data, generate timetables, and display relevant statistics.
- **Himani Das:** Handled the frontend authentication system to secure user access, developed parts of the frontend interface, and resolved UI/UX issues to ensure smooth and consistent interaction with backend services.

Team Communication

Meetings

- 1. Pre-client Team Meeting:**
 - **When:** Every Friday at 7:00 PM.
 - **How:** A In-person team meeting to prepare for the client meeting. During this session, the team will finalize deliverables, discuss progress, and strategize how to present updates effectively to the client.
- 2. Client Meeting:**
 - **When:** Every Saturday at 2:30 PM.
 - **How:** An in-person meeting at the IT Office to directly communicate with the client. The team will present their work, address any concerns, and gather feedback to align with the client's expectations.
- 3. Post-client Team Meeting:**
 - **When:** Every Saturday at 7:00 PM.
 - **How:** A follow-up meeting after the client session to analyze feedback, plan next steps, and delegate tasks for the following week.

Communication

- Outside of the scheduled meetings, the team and client will use **WhatsApp** and **Outlook Mail** as the primary communication channel.

Development Environment

The project will primarily use **React and JS** as the programming language for development and **MongoDB** for managing the database. This tech stack is not only efficient for handling application logic and data storage.

Milestone Schedule

Milestone	Due Date	Release	Deliverable?
<i>Create draft requirements</i>	25/01/25	R1	Yes
<i>Canva Design</i>	25/01/25	R1	Yes
<i>Project Concept</i>	25/01/25	R1	Yes

<i>Finalize requirements</i>	31/01/25	R1	Yes
<i>Project Plan</i>	31/01/25	R1	Yes
<i>Design Algorithm</i>	04/02/25	R1	Yes
<i>Finalize Algorithm</i>	07/02/25	R1	Yes
<i>BackEnd and Algorithm for timetable</i>	10/02/25	R1	Yes
<i>Testing for TimeTable</i>	15/02/25	R1	Yes
<i>FrontEnd UI</i>	15/02/25	R1	Yes
<i>Integration for Exam timetable part</i>	20/02/25	R1	Yes
<i>Algorithm Design for Seating arrangement</i>	05/03/25	R1	Yes
<i>Backend and Algorithm for Seating arrangement</i>	15/03/25	R2	Yes
<i>Testing for Seating Arrangement</i>	25/03/25	R2	Yes
<i>Integration for Seating Arrangement</i>	5/04/25	R2	Yes
<i>Design Invigilation Duty</i>	9/04/25	R2	Yes
<i>Backend and Algorithm for Invigilation Duty</i>	12/04/25	R2	Yes
<i>Testing for Invigilation Duty</i>	14/04/25	R2	Yes
<i>Integration for Invigilation Duty</i>	15/04/25	R2	Yes
<i>Sending automated reminder mails</i>	16/04/25	R2	Yes