



- Problem Statement: College Clubs &
 Events Management Platform
- Category: JUNIOR
- Team Name: VERTEX
- Team Leader: GEETANJALI KADAM





VISUAL REPRESENTATION









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Clubs



CSI - PICT Student Branch

Details about CSI club will go here.

Events

List of events will go here.







Clubs	Events	Event Calendar	Register	Interaction Box
		Clubs		

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SUN 26	MON 27	TUE 28	WED 29	THU 30	FRI 31	SAT Feb 1
2	3	4	5	6	7	8
9	10	11	12	(3)	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	Mar 1
Google Calend	dar GMT+05:30					+



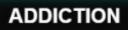




Clubs Events Event Calendar Register Interaction Box

Events











Tech Stack

- Frontend: HTML, CSS, and JavaScript (with React for a more dynamic user interface, if desired) – employed to develop a responsive and intuitive interface.
- Backend: Node.js with Express.js effectively manages user requests, authentication, and database interactions.
- Database: MongoDB (NoSQL) or Firebase securely stores user information, club/event details, and participation records.
- Authentication: Firebase Auth/Auth0 guarantees secure user login and role-based access control (Student, Club Admin, Platform Admin).







Key Features



CORE FUNCTIONALITY

A streamlined platform to enhance efficiency, engagement, and organization in club operations with the following key features:

- Member Management: Track member details, roles, and renewals.
- Event Management: Plan, schedule, and monitor events effortlessly.
- Communication: Send updates, alerts, and enable participant chats.
- Access Control: Securely manage roles and permissions.
- Reports: Analyze membership trends and financial data.
- Al Assistance: Simplify event planning and task prioritization.
- Awarded automated Certificates on behalf of clubs.





KEY ALGORITHMS

Key Algorithms Driving the Platform

- Event Registration Handling Algorithm:
- Validates user inputs (email, roll number, year, name, contact).
- Ensures unique registrations and stores data in MongoDB.
- Provides user feedback on registration status.
- Event Calendar Integration Algorithm:
- Dynamically displays the calendar with embedded iframe.
- INSTANT QUERY SUBMISSION FORM ATTACHED BELOW OF WEBPAGE FOR USERS.
- DARK AND LIGHT MODE INTEGRATED FOR COMFORT.
- INCLUDED A GLIMPSES OF PREVIOUS YEARS CLUB ACTIVITIES FOR Visual attraction.
- An instant scroll up button for ease.
- And at last a social media page promotion of clubs.











Challenge 1: Managing real-time event registrations

 Approach: Use Firebase Realtime Database or WebSockets to ensure instant updates when students register for events.

Challenge 2: Secure authentication & user role management

 Approach: Implement Firebase Auth/Auth0 for login and restrict access based on user roles (Student, Club Admin, Platform Admin).

Challenge 3: Efficient participation tracking & certificate generation

Approach: Store attendance data in the database and automate certificate generation using PDFKit or Canva API.









Challenge 4:enquiry/complaint of users about events

 Approach: included a form for users where they can register there enquiry and response can provided according.

Challenge 5: Light and dark mode for people with disorders or other problems.

 Approach: implemented a solution for it as included a dark/light mode for club page.

