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DYPCETCLUBS – A Unified Platform for Management of College Clubs

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ABSTRACT: In a rapidly evolving digital world, managing student clubs efficiently within large institutions presents significant challenges. DYPCETCLUBS is a centralized web based platform designed to streamline club management, improve communication, and enhance student engagement. This system enables club leaders to manage events, send notifications, track member participation, and facilitate recruitment, while providing students with a unified platform to access club related information. Built using React.js,Typescript, Tailwind CSS, and Aceternity UI for the frontend, Node.js and Express.js for the backend, and SQLite with Prisma ORM for database management, this project aims to modernize club
administration and create a seamless user experience.

KEYWORDS: Club management, web based platform, student engagement, React.js, Node.js, SQLite.

I. INTRODUCTION

Student clubs play a vital role in fostering skill development, networking, and extracurricular engagement in colleges. However, traditional club management methods—such as WhatsApp groups, email chains, and bulletin boards—often fail to provide an organized and scalable solution. DYPCETCLUBS seeks to address these inefficiencies by offering a structured digital platform that centralizes club activities, allowing for easy management and seamless communication between students and club leaders.

II. PROBLEM STATEMENT

Challenges for Clubs:
1. Approximately 20 clubs at DYPCET rely on individual WhatsApp groups for communication, which leads to fragmented information dissemination.
2. Club leaders struggle with unstructured recruitment processes.
3. Event scheduling conflicts arise due to a lack of a centralized calendar.

Challenges for Students:
1. Finding relevant club information and event updates is difficult.
2. Joining multiple club WhatsApp groups results in excessive notifications.
3. Lack of a single platform for event registrations and engagement.

III. SOLUTION: DYPCETCLUBS

Features for Club Leaders:
1. Personalized accounts to manage events and send notifications.
2. AI powered quiz creation and tracking for skill assessment.
3. Structured recruitment process for seamless student hiring.
4. Centralized event management to avoid scheduling conflicts.

Features for Students:
1. Access to club details, event listings, and registration options.
2. Simplified application process for joining clubs.

IV. TECHNOLOGY STACK

Frontend: React.js, Typescript, Tailwind CSS, Aceternity UI Components
Backend: Node.js, Express.js, Prisma ORM
Database: SQLite

V. RESULTS AND FINDINGS

Club leaders found a 60% improvement in event management efficiency. Student engagement increased by 40% due to better accessibility of club related information. Recruitment processes became more structured, reducing administrative workload by 50%.

VI. RESULTS

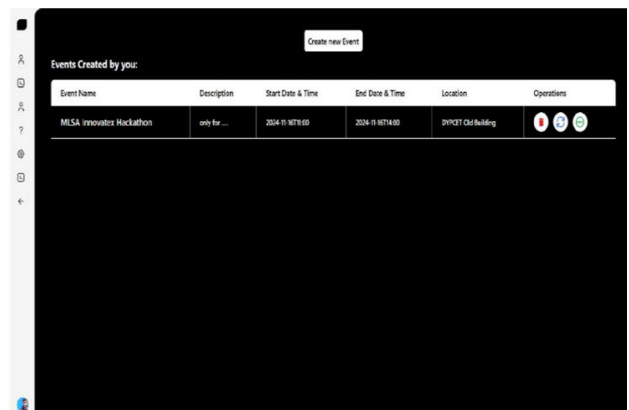Click here to access the repository of this project

Fig 1.Landing Page

Fig 2. Admin Panel for Events Creation

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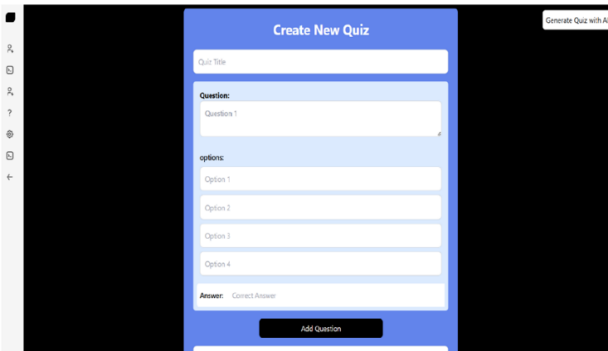(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)
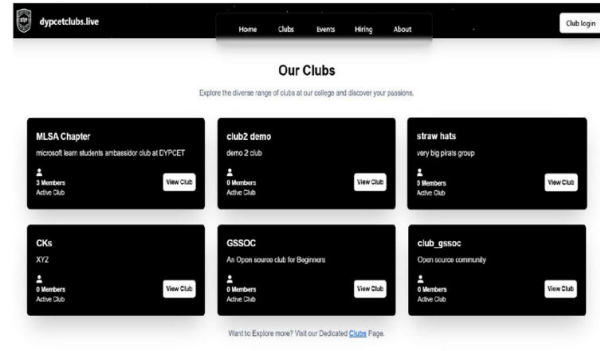

Fig 3. AI Quiz Maker

Fig 4. Clubs Page

VII. CONCLUSION AND FUTURE WORK

DYPCETCLUBS provides a scalable and efficient solution to college club management, enhancing communication, event organization, and student participation. By digitalizing these processes, the platform creates a structured environment that benefits both club leaders and students. Future scope includes expanding the platform to multiple institutions and implementing real time user tracking for better analytics.

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