Project Proposal: NSU ClubHub (Group-6,Cse299.4)

A Centralized Club Management & Engagement Portal for North South University

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Executive Summary & Background

1.1 Project Title

Project Name: NSU ClubHub

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1.2 Executive Summary

North South University boasts a vibrant co-curricular culture with numerous clubs and student organizations. However, the current landscape of club management is fragmented. Students often rely on scattered Facebook groups, physical posters, and word of mouth to track events, recruitment drives, and club details.

NSU ClubHub proposes a unified, web-based platform designed to bridge the gap between students and student organizations. This portal will serve as a "One-Stop Solution" where students can explore clubs, view a centralized event calendar, track recruitment deadlines, and register for events. Simultaneously, it will provide Club Executives and the Office of Student Affairs with powerful tools to manage memberships, approve events, and analyze student engagement.

1.3 Problem Statement

Despite the high activity level of NSU clubs, several key inefficiencies exist:

- **Information Asymmetry:** New students (freshers) struggle to find comprehensive lists of active clubs and their specific mandates.
- **Missed Opportunities:** Students frequently miss recruitment deadlines (General Member recruitments) due to the lack of a centralized notification system.
- **Event Clashes:** Without a master calendar, clubs often schedule major events on overlapping dates, splitting the audience.
- **Administrative Burden:** Club executives spend excessive time manually managing spreadsheets for member databases and event registrations.

1.4 Objectives

- **Centralization:** To create a single repository for all club information, history, and constitutions.
- **Accessibility:** To ensure every NSU student has 24/7 access to event schedules and recruitment info.
- **Efficiency:** To automate the recruitment and event registration process (ticketing/RSVP).
- **Transparency:** To provide a clear view of club activities and financial requirements (if applicable) to the administration.

Proposed Solution & Feature Scope

2.1 Solution Overview

The solution is a responsive web application featuring three distinct user roles: **Student (General User)**, **Club Admin (Executive Members)**, and **Super Admin (CSE299.4 Group:6)**.

2.2 Key Features by User Role

A. For Students (General View)

- **Club Directory:** A searchable list of all NSU clubs (e.g., YES, YEF, CPC, APC). Each club profile will display:
  - Mission/Vision & Constitution.
  - Current Executive Body (EB) members.
  - Gallery (Photos/Videos of past events).
  - Contact forms/links.
- **Master Event Calendar:** An interactive calendar showing all upcoming seminars, workshops, cultural shows, and competitions. Filters available by "Academic," "Cultural," or "Sports."
- **Recruitment Portal:** A dedicated section highlighting "Open Recruitments." Students can apply directly through the site, track their application status (Interview Scheduled/Accepted/Rejected), and receive automated email notifications.
- **Event Registration:** Integrated ticketing system for events. Students can RSVP or purchase tickets (via payment gateway integration) and receive a QR code entry pass.

B. For Club Executives (Club Admin View)

- **Dashboard:** Analytics on page views, follower growth, and recent event engagement.
- **Member Management:** A CRM-style database to manage General Members (GMs). Features include promoting members, tracking attendance, and flagging inactive members.
- **Event Creation Tool:** Forms to submit new events for approval. Once approved by the Super Admin, they publish automatically to the Master Calendar.
- **Recruitment Manager:** Tools to create application forms, review submissions, grade interviewees, and send bulk acceptance/rejection emails.

C. For NSU Administration (Super Admin View)

- **Oversight:** Ability to view all club activities and financial requests.
- **Approval Workflow:** System to approve or reject event dates to prevent clashes.
- **Global Announcements:** Ability to post notices visible to all clubs (e.g., "Club Fair Dates Announced").

2.3 Value-Added Features

- **Alumni Connect:** A section for past club members to stay updated and offer mentorship.
- **Resource Library:** Downloadable templates for budget proposals, room booking forms, and sponsorship letters.
- **The "Wall of Fame":** A section highlighting recent achievements of clubs in national/international competitions.

Technical Architecture & Implementation

3.1 Technical Stack

To ensure scalability, security, and speed, we propose the following Modern Tech Stack:

- **Frontend:** React.js or Next.js
    - *Benefit:* Extremely fast, SEO-friendly, and provides a smooth "app-like" experience.
- **Backend:** Node.js with Express or Django (Python).
    - *Benefit:* Handles high traffic during recruitment seasons efficiently.
- **Database:** PostgreSQL or MongoDB.
    - *Benefit:* Flexible data structure for storing complex student profiles and event data.
- **AI Implementation:** API Chatbot
    - Benefit: The User can ask about any function that will take place in the future, and it will suggest the relevant events.

3.2 Security Measures(for future)

- **Data Encryption:** All student data (IDs, phone numbers) will be encrypted.
- **Role-Based Access Control (RBAC):** Strict permissions ensure a Club Admin cannot edit another club's page.
- **DDoS Protection:** To handle traffic surges during "Club Fair" or "Recruitment" weeks.

3.3 Implementation Timeline (Est. 12 Weeks)

Phase	Duration	Deliverables
1. Planning & Design	Weeks 1-2	Requirements gathering, UI/UX Wireframes, Database Schema design.
2. Core Development	Weeks 3-7	Frontend coding, Backend API setup, User Authentication system.
3. Feature Integration	Weeks 8-9	Calendar integration, Recruitment logic, Notification systems.
4. Testing & QA	Weeks 10-11 (Potential submission)	Security auditing, Bug fixing, Beta testing with select Club Executives.
5. Deployment	Week 12 (Potential submission)	Live server launch, User Training for Executives.

Support & Conclusion

4.1 Maintenance & Support

Post-launch support is critical for the platform's longevity. We propose a 6-month specialized support period including:

- **Onboarding Workshops:** Training sessions for current Club Executives on how to use the dashboard.
- **Bug Fixes:** Immediate resolution of any technical glitches.

4.2 Future Scalability

Once established, this platform can scale to include:

- **Mobile App:** A dedicated iOS/Android app for push notifications.
- **E-Commerce Integration:** Selling club merchandise directly through the site.
- **Inter-University Linkage:** A portal to host inter-university fests.

4.3 Conclusion

The **NSU ClubHub** is not just a website; it is a digital ecosystem designed to modernize how North South University manages its extracurricular activities. By moving away from disjointed manual processes to a centralized digital solution, NSU can increase student engagement, streamline administrative oversight, and further solidify its reputation as a university with a premier student life culture.