University Club & Event Management System

Database Design Project

By: Hamza Rabiu & Alivia Parker

Overview

The University Club & Event Management System is designed to centralize and streamline how student organizations manage memberships, events, resource reservations, and finances.

Problem Statement

Clubs use scattered spreadsheets and manual processes

Hard to track memberships, event attendance, and finances

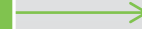No centralized visibility for advisors and administrators

Data errors and inefficiency are common

Project Objective

Centralize all club and event operations into one database

Improve accuracy, accountability, and decision-making

Automate reports and reduce manual work

Key Features

Membership management

Event scheduling and attendance tracking

Resource (room/equipment) reservations

Financial tracking: dues, ticket sales, expenses

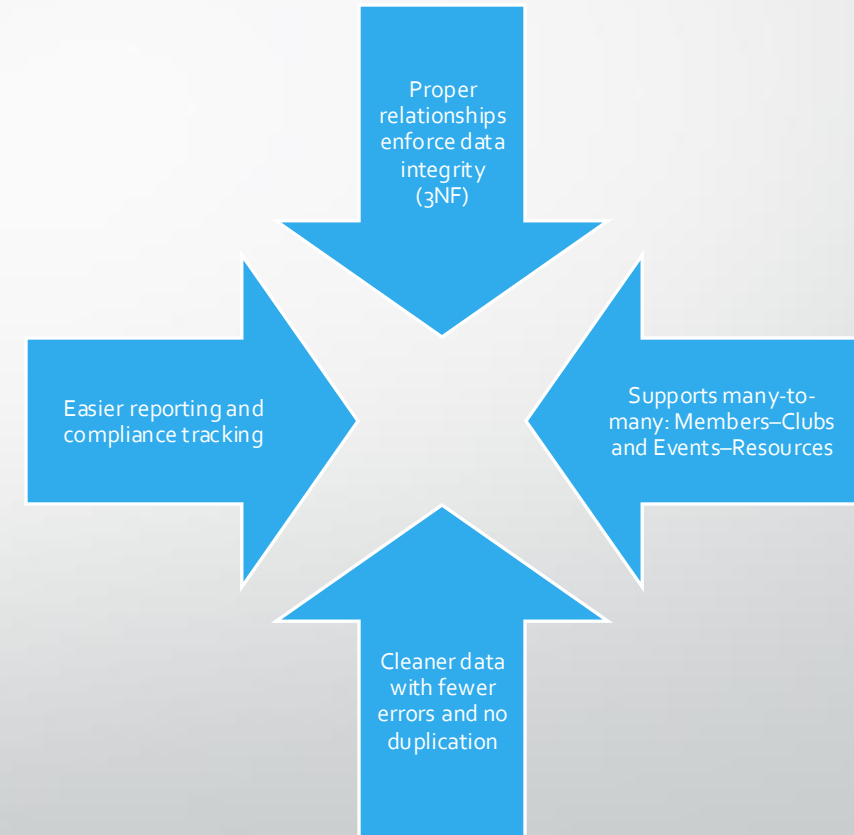Role tracking for officers vs general members

Main Users

- Club officers
- Faculty advisors
- Student activities/engagement office

Main Entities / Tables

- Club

- Member

- ClubMembership

- Event

- EventAttendance

- Resource

- EventResourceReservation

- Transaction

Why the Design Works

Proper relationships enforce data integrity (3NF)

Easier reporting and compliance tracking

Supports many-to-many: Members–Clubs and Events–Resources

Cleaner data with fewer errors and no duplication

Example Queries

- OMIS majors attending last 3 events of a specific club

- Financial summary by club and timeframe

- Most active members based on attendance

- Events going over budget

- Resource utilization by department

Forms & User Interface

- Club main form with member + event subforms

- Event main form with attendance subform

- Transaction entry form for payments and expenses

Reports Generated

- Event attendance report
- Club financial summary report
- Member participation report
- Upcoming events schedule
- Resource usage report

Benefits to the University

- Accurate attendance + funding oversight
- Better resource allocation
- Improved student engagement tracking
- Faster administrative auditing
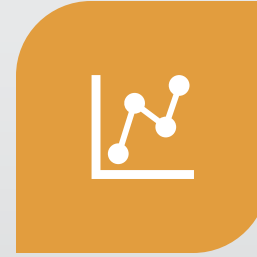
ERD DIAGRAM

Future Enhancements

- Role-based security permissions

- Integration with student information systems

- Power BI/Tableau dashboards

- QR-code check-in / online registration

Conclusion

CENTRALIZED SOLUTION FOR ALL CLUB ACTIVITIES

EFFICIENT, SCALABLE, AND DATA-DRIVEN

SUPPORTS BOTH OPERATIONAL AND STRATEGIC GOALS