Campus Event Management System – Design Overview

1. Objective

Create a simple platform to handle campus events where:

- Staff can create and manage events
- Students can register and participate
- Admins can generate reports like attendance percentage, registration count, and feedback ratings

2. Core Features

1. **Event Management:** Create, update, cancel, or delete events.
2. **Student Registration:** Students can sign up for events and view event details.
3. **Attendance Tracking:** Staff can mark attendance for students.
4. **Feedback Collection:** Students submit ratings or comments for events.
5. **Reporting:** Admins can view registrations, attendance, and feedback summaries.

3. Data Entities & Structure

Entity	Attributes	Purpose
Students	StudentID, Name, Email, CollegeID	Store student info
Events	EventID, EventName, EventType, Date, CollegeID	Store event info
Registrations	RegID, StudentID, EventID	Track which students registered
Attendance	AttID, StudentID, EventID, Status	Track attendance status
Feedback	FeedID, StudentID, EventID, Rating	Collect student feedback

4. API Design (Sample Endpoints)

- POST /events/create → Create a new event
- POST /students/register → Register a student
- POST /attendance/mark → Mark attendance
- POST /feedback/submit → Submit feedback
- GET /reports/event/{id} → Generate report for a specific event

5. Typical Workflow

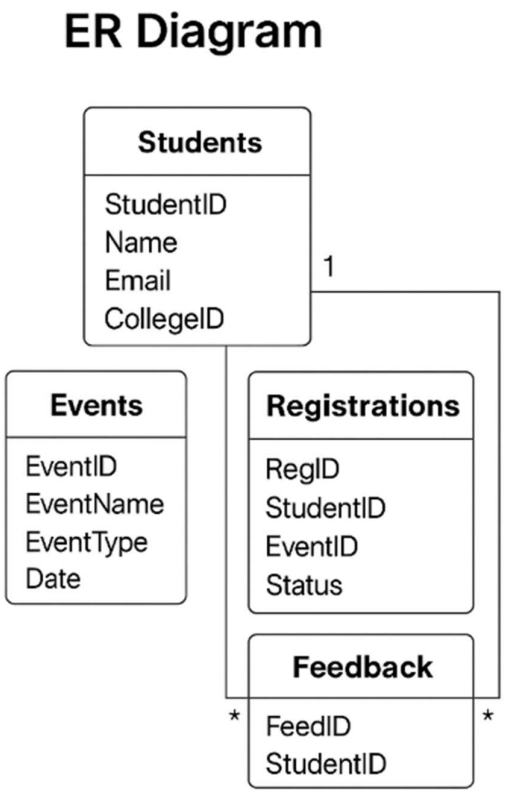
1. Staff creates an event
2. Student registers for the event
3. Student attends event → Staff marks attendance
4. Student submits feedback
5. Admin generates reports

6. Handling Special Cases

- **Duplicate Registrations:** System checks if StudentID already registered for the same EventID.
- **Event Cancellation:** Notify registered students, mark event as cancelled.
- **No Feedback:** Default feedback to "Not Submitted" in reports.

7. Diagrams

- **ER Diagram:** Shows relationships between Students, Events, Registrations, Attendance, Feedback



- **Sequence Diagram:** Shows step-by-step workflow from event creation to report generation