

# **CSE302: Database Systems**

## **Term Project Description [Spring 2024]**

### **Title: Campus Events Management System**

#### **Description:**

In today's bustling university environments, organizing and managing various campus events efficiently is challenging. The Campus Events Management System aims to streamline this process by providing a comprehensive web-based platform that facilitates the scheduling, coordination, and participation of events within the university community.

#### **Key Features:**

- **User Roles and Permissions:**

The system will support multiple user roles, including administrators, event organizers, faculty members, and students. Each role will have specific permissions and access levels tailored to their responsibilities.

Administrators will have overarching control over the system, including user management, event approval, and system configuration.

Event organizers will be able to create, manage, and promote events within their respective departments or student organizations.

- **Event Scheduling and Management:**

Administrators and authorized organizers can schedule events through an intuitive interface, providing details such as event title, date, time, location, description, and category.

The system will support recurring events, allowing organizers to set up daily, weekly, monthly, or custom recurrence patterns for events such as club meetings, workshops, and seminars.

Event management tools will enable organizers to track registrations, manage attendee lists, and communicate with participants effectively.

- **Registration and Attendance Tracking:**

Students and faculty members will be able to browse upcoming events, register their interest, and receive confirmations or reminders via email or in-app notifications.

Attendance tracking features will allow event organizers to monitor attendee participation, check-in registered users at events, and generate attendance reports for administrative purposes.

- **Feedback and Evaluation:**

Attendees will have the opportunity to provide feedback and ratings for events they've attended, helping organizers gather valuable insights for future event planning and improvement.

Organizers can collect feedback on various aspects such as event content, presentation quality, venue suitability, and overall satisfaction.

- **Notifications and Reminders:**

The system will incorporate a notification system to keep users informed about upcoming events, registration deadlines, event changes, or cancellations.

Users can customize their notification preferences based on event categories, interests, or specific organizers.

- **User Profiles and Preferences:**

Each user will have a personalized profile where they can manage their event registrations, view past attendance history, update contact information, and adjust notification settings.

Preference settings will allow users to tailor their event recommendations and notifications based on their interests, academic disciplines, or extracurricular activities.

## **Possible Entity Sets and Relationships:**

### **Entities:**

- **User:**  
Attributes: UserID (Primary Key), Username, Password, Email, Role (Admin, Organizer, Student, Faculty), Profile Picture, Preferences, Notification Settings, Registration History.
- **Event:**  
Attributes: EventID (Primary Key), Title, Description, Category, Location, Date, Time, Capacity, OrganizerID (Foreign Key), Status (Approved, Pending, Cancelled).
- **Attendance:**  
Attributes: AttendanceID (Primary Key), EventID (Foreign Key), UserID (Foreign Key), CheckInTime.
- **Feedback:**  
Attributes: FeedbackID (Primary Key), EventID (Foreign Key), UserID (Foreign Key), Rating, Comments, SubmissionTime.

**Relationships:**

- User-Event:
  - One-to-Many relationship between User and Event:
  - One User can organize Many Events.
  - One Event is organized by One User.
- User-Attendance and Attendance-Event:
  - Many-to-Many relationship between User and Event through Attendance:
  - One User can attend Many Events.
  - One Event can have Many Attendees.
  - Attendance acts as a linking table between User and Event.
- Event-Feedback:
  - One-to-Many relationship between Event and Feedback:
  - One Event can have Many Feedback entries.
  - Feedback is specific to One Event.

This ER model captures the essential entities and their relationships in the Campus Events Management System. Users can organize events, attend multiple events, and provide feedback for events they've attended. Events have details such as title, description, date, time, and location, and can be organized by users with appropriate permissions. Attendance records the association between users and events, while feedback captures user evaluations of events.

**You may add more entity sets and relationships.**