

# **SRS for**

## **Student Clubs Event Management Platform**

### **Introduction:**

The following document outlines the requirements for a college club management portal, which will provide a medium for club coordinators to get approval to organize events and allow students to register for approved events. The system will also enable users to access basic information about clubs and their members, as well as request the formation of new clubs.

### **Problem Background:**

The current process for club coordinators to organize events is manual and time-consuming. They must submit a written proposal to the Student Council Clubs Coordinator, who then reviews it and provides approval or denial based on the availability of resources and the impact on other clubs. The system will automate this process and provide a digital platform for club coordinators to manage their events and communicate with students interested in participating.

### **Stakeholders / Users:**

- Club Coordinators: These are the individuals who organize events for their respective clubs. They will use the portal to submit event proposals, access information about clubs and members, and request the formation of new clubs.
- Students: These are the individuals who can register for approved events and view basic information about clubs.
- Student Council Clubs Coordinator: This is a member of the Student Council responsible for approving or denying event proposals submitted by club coordinators.
- Admin: This is an admin staff from the Student Affairs department of the university, who will have the right to change the club coordinators and manage user accounts.

### **Functional Requirements:**

1. Event Management: The portal should allow club coordinators to submit event proposals, which include details such as date, time, location, and purpose of the event. The Student Council Clubs Coordinator must be able to review these proposals and provide approval or denial based on availability of resources and impact on other clubs.
2. Event Registration: Once an event is approved, students should be able to register for it through the portal using their college email addresses through Google API.
3. Club Information Management: The portal should allow users to access basic information about clubs and their members. This includes club name, purpose, meeting time, location, and contact details of club coordinators.

4. **New Club Formation Requests:** Users should be able to request the formation of a new club through the portal. This will involve providing details such as club name, purpose, proposed meeting time, location, and list of proposed members. The Student Council Clubs Coordinator must review these requests and provide approval or denial based on availability of resources and impact on other clubs.
5. **User Management:** The system should allow the admin to manage user accounts for club coordinators, students, and the Student Council Clubs Coordinator. This includes adding new users, modifying existing user details, and deleting inactive users.
6. **Reporting:** The system should provide reporting features that enable the admin to view statistics on event attendance, club membership, and new club formation requests.
7. **Security:** The system must ensure the privacy and security of user data by implementing appropriate authentication and authorization mechanisms.
8. **User Interface:** The portal should have an intuitive and responsive user interface that is easy to navigate for all stakeholders.

## **Performance Requirements:**

1. **Event Management:** The system should be able to handle a minimum of 50 event proposals per day, with an average response time of less than 24 hours.
2. **Event Registration:** The system should be able to handle a minimum of 500 registrations per day for approved events, with an average processing time of less than 1 hour.
3. **Club Information Management:** The system should be able to handle a minimum of 50 club information updates per day, with an average response time of less than 24 hours.
4. **New Club Formation Requests:** The system should be able to handle a minimum of 5 new club formation requests per day, with an average processing time of less than 1 week.
5. **User Management:** The system should be able to handle a minimum of 50 user account modifications per day, with an average response time of less than 24 hours.
6. **Reporting:** The system should generate reports in real-time and provide them to the admin within 24 hours of request.
7. **Security:** The system must implement appropriate security measures to protect user data from unauthorized access or breaches.
8. **User Interface:** The portal should load in less than 3 seconds on average for all stakeholders.

## **Design Constraints:**

1. **Technology Stack:** The system must be built using a web-based technology stack, such as HTML5, CSS3, and JavaScript.
2. **Integration:** The system should integrate with Google API for user authentication and authorization.
3. **Scalability:** The system should be designed to handle an increase in the number of users, events, and clubs over time.

4. Security: The system must implement appropriate security measures to protect user data from unauthorized access or breaches.
5. User Experience: The portal should provide a seamless user experience for all stakeholders, with an intuitive and responsive interface.
6. Data Management: The system should be able to store and manage large amounts of data related to events, clubs, users, and reports.
7. Reporting: The system should generate detailed reports on event attendance, club membership, and new club formation requests that can be accessed by all stakeholders through the web-based interface.
8. Collaboration: The system should enable collaboration between club coordinators, students, and the Student Council Clubs Coordinator through a centralized platform.

### **External Interfaces:**

1. User Interface: The portal will be accessible to all stakeholders through a web-based interface that is responsive on various devices.
2. Google API: The system will integrate with Google API for user authentication and authorization.
3. Student Council Clubs Coordinator: The system should provide an easy-to-use interface for the Student Council Clubs Coordinator to review event proposals, approve or deny new club formation requests, and view reports on event attendance and club membership.
4. Admin: The system should provide a user-friendly interface for the admin to manage user accounts, access reports, and monitor system activity.
5. Reporting: The system will generate detailed reports on event attendance, club membership, and new club formation requests that can be accessed by all stakeholders through the web-based interface.

### **Security Requirements:**

1. Authentication: The system should implement user authentication mechanisms to ensure only authorized users have access to sensitive data and features.
2. Authorization: The system should provide role-based authorization to ensure that each stakeholder has access only to their designated areas of the portal.
3. Data Encryption: The system should encrypt all sensitive data, such as passwords and credit card information, to protect it from unauthorized access or breaches.
4. Access Control: The system should implement appropriate access control measures to restrict access to sensitive data and features based on user roles and permissions.
5. Input Validation: The system should validate all user input to prevent common attacks such as SQL injection, cross-site scripting (XSS), and cross-site request forgery (CSRF).
6. Output Encoding: The system should encode all output data to protect against XSS attacks.
7. Error Handling: The system should handle errors gracefully and provide appropriate error messages to users.

8. **Logging:** The system should implement logging mechanisms to track user activity, system events, and security-related incidents.
9. **Compliance:** The system should comply with relevant laws and regulations related to data privacy and security.

## **Use Case Details:**

### **1. Club Coordinator Submits an Event Proposal**

- 1.1. **Actor:** Club Coordinator
- 1.2. **Purpose:** To submit an event proposal to the Student Council Clubs Coordinator for approval.
- 1.3. **Event Flow:**
  - 1.3.1. The club coordinator logs in to the portal, fills out a form with details about the proposed event, and submits it to the system.
  - 1.3.2. The Student Council Clubs Coordinator reviews the proposal and provides approval or denial based on availability of resources and impact on other clubs.
- 1.4. **Special/Exceptional Requirements:**
  - 1.4.1. The system should provide an easy-to-use interface for club coordinators, with clear instructions on how to submit event proposals.
  - 1.4.2. The Student Council Clubs Coordinator must receive a notification when a new proposal is submitted, so they can review it in a timely manner.

### **2. Student Registers for an Approved Event**

- 2.1. **Actor:** Student
- 2.2. **Purpose:** To register for an approved event through the portal using their college email address.
- 2.3. **Event Flow:**
  - 2.3.1. The student logs in to the portal using their college email address through Google API, views a list of approved events, and selects one to register for it.
  - 2.3.2. The system validates their registration and provides confirmation of their participation.
- 2.4. **Special/Exceptional Requirements:**
  - 2.4.1. The system should provide clear instructions on how students can access event information and register for events.
  - 2.4.2. Students must be able to view the status of their registration in real-time, so they know if they have been approved or not.

### **3. User Requests New Club Formation**

- 3.1. **Actor:** User (can be a club coordinator, student, or other stakeholder)
- 3.2. **Purpose:** To request the formation of a new club through the portal.
- 3.3. **Event Flow:**

- 3.3.1. The user logs in to the portal, fills out a form with details about the proposed club, and submits it to the system.
    - 3.3.2. The Student Council Clubs Coordinator reviews the proposal and provides approval or denial based on availability of resources and impact on other clubs.
  - 3.4. **Special/Exceptional Requirements:**
    - 3.4.1. The system should provide an easy-to-use interface for users to request new club formation, with clear instructions on what information is required.
    - 3.4.2. The Student Council Clubs Coordinator must receive a notification when a new proposal is submitted, so they can review it in a timely manner.
- 4. **Admin Manages User Accounts**
  - 4.1. **Actor:** Admin
  - 4.2. **Purpose:** To manage user accounts for club coordinators, students, and the Student Council Clubs Coordinator through the portal.
  - 4.3. **Event Flow:** The admin logs in to the portal using their credentials, views a list of user accounts, and performs actions such as adding new users, modifying existing user details, and deleting inactive users.
  - 4.4. **Special/Exceptional Requirements:**
    - 4.4.1. The system should provide an easy-to-use interface for admins to manage user accounts, with clear instructions on what information is required.
    - 4.4.2. Admins must be able to view the status of each account in real-time, so they know if it has been approved or not.
- 5. **Reporting: Event Attendance**
  - 5.1. **Actor:** Admin
  - 5.2. **Purpose:** To generate reports on event attendance for club coordinators, students, and the Student Council Clubs Coordinator through the portal.
  - 5.3. **Event Flow:**
    - 5.3.1. The admin logs in to the portal using their credentials, selects a date range, and generates a report that shows the number of attendees for each approved event during that time period.
  - 5.4. **Special/Exceptional Requirements:**
    - 5.4.1. The system should provide an easy-to-use interface for admins to generate reports on event attendance, with clear instructions on what information is required.
    - 5.4.2. Admins must be able to view the status of each report in real-time, so they know if it has been generated or not.
- 6. **Reporting: New Club Formation Requests**
  - 6.1. **Actor:** Admin

- 6.2. **Purpose:** To generate reports on new club formation requests for club coordinators, students, and the Student Council Clubs Coordinator through the portal.
  - 6.3. **Event Flow:**
    - 6.3.1. The admin logs in to the portal using their credentials, selects a date range, and generates a report that shows the number of new club formation requests submitted during that time period.
  - 6.4. **Special/Exceptional Requirements:**
    - 6.4.1. The system should provide an easy-to-use interface for admins to generate reports on new club formation requests, with clear instructions on what information is required.
    - 6.4.2. Admins must be able to view the status of each report in real-time, so they know if it has been generated or not.
7. **Reporting: Club Membership**
- 7.1. **Actor:** Admin
  - 7.2. **Purpose:** To generate reports on club membership for club coordinators, students, and the Student Council Clubs Coordinator through the portal.
  - 7.3. **Event Flow:**
    - 7.3.1. The admin logs in to the portal using their credentials, selects a date range, and generates a report that shows the number of new members added to each club during that time period.
  - 7.4. **Special/Exceptional Requirements:**
    - 7.4.1. The system should provide an easy-to-use interface for admins to generate reports on club membership, with clear instructions on what information is required.
    - 7.4.2. Admins must be able to view the status of each report in real-time, so they know if it has been generated or not.

## Glossary of Terms:

The following are some terms used in the SRS document:

1. Club Coordinator: An individual who organizes events for their respective clubs.
2. Event Proposal: A request submitted by a club coordinator to organize an event, including details such as date, time, location, and purpose of the event.
3. Student Council Clubs Coordinator: A member of the Student Council responsible for approving or denying event proposals submitted by club coordinators.
4. User Account: An account created in the system to enable access to the portal by stakeholders such as club coordinators, students, and the Student Council Clubs Coordinator.
5. Event Registration: The process of registering for an approved event through the portal using a college email address.
6. Reporting: Generating reports on various aspects of the system, such as event attendance, new club formation requests, and club membership.