

# SRS for

## Student Clubs Event Management Platform

### Problem Background:

The primary purpose of this platform is to enable club coordinators to post requests for scheduling events, which would be subject to approval by the Student Council's Clubs Coordinator. Post this approval, the event would be added to the platform for registration by the student body, and an email notification would be sent to all the students for the same. The platform would also have dedicated pages for the clubs, which the respective club's coordinator would manage.

### Stakeholders / Users:

The primary users of the platform are (i) students of the university, (ii) the coordinators of various clubs, (iii) the Student Council's Clubs Coordinator and (iv) a representative from the Dean of Student Affairs office (Admin).

### Functional Requirements:

1. All IIITD domain users should be able to log into the platform using their IIITD domain Gmail IDs. (all)
2. The platform should enable the club coordinators to schedule events for any given date and time. While applying for the same, they should be permitted to edit the event details and registration requirements. (Club Coordinators)
3. The platform would also have dedicated pages for the clubs, which the respective club's coordinator would manage. A club coordinator should be allowed to edit this page by editing club information, images from past events and point of contact information. (Club coordinators)
4. The Student Council's Clubs Coordinator should be given access to a page that lists all pending requests for scheduling the events while marking potential conflicts and should be able to approve or decline each one of them. (SC Clubs coordinator)
5. After the event's approval, it should be added to the platform for registration by the student body, and an email notification should be sent to all the students. Students should be able to post comments regarding the event on the platform. (all)
6. Students should be allowed to search for upcoming events based on their interests and view them. (all)
7. The platform's admin access should be given to a representative from the Student Affairs office(Admin) who can edit event details, Club Coordinator and respective clubs' and students' accounts information. (Admin)
8. There should be a report feature in the platform to enable everyone to report incidents and issues with the platform. (all)
9. Students should be able to request for the formation of a new club. (all).

10. The approval for new clubs will be a two-stage process involving the approval of the Student Council Clubs Coordinator and then the admin. (SC Clubs Coordinator and Admin)

### **Performance Requirements:**

1. The platform should withstand considerable amounts of traffic and frequent shifts in load and traffic coming its way.
2. The platform should be responsive and have an average response time of 300 milliseconds or less under normal load.

### **Design Constraints:**

1. The platform should be developed while keeping accessibility for all users in mind and should have features like screen readers, font adjusters, etc.
2. The platform should be dynamic and should be able to adjust to varying screen resolutions and devices (like laptops, cellphones, tablets, etc.).
3. The platform should be easy to maintain, and the code should be readable and well-documented.
4. The tech stack for the platform should be the following:
  - a. React JS for the front-end development.
  - b. Node JS for the back-end development with MongoDB database.

### **External Interfaces:**

1. The platform should be compatible with all major browsers like Safari, Chrome, Firefox, Brave, Microsoft Edge, etc.
2. The platform would use Google sign-in API to allow users to log in using their IIIT Delhi domain email address. Upon login, the users would be redirected to Google API's interface.
3. The platform should be able to send email notifications to all students and other users.

### **Security Requirements:**

1. The platform should be well protected from known attacks and penetration attempts to enable the protection of user information and data, like XSS (cross-site scripting) and SQL injection.
2. The platform should prevent packet interception and tampering with outgoing and incoming requests.
3. The platform should verify users using 2-factor authentication and IIIT Delhi domain login should be implemented using Google's API.
4. The user data should be stored and maintained as per the institute's policy.

### **Use Cases Details:**

The following are the fundamental users of our portal:

1. General students
2. Club coordinators

3. Student Council Club Coordinator
4. Admin (Admin Personnel or DoSA)

## 1. Exploring Upcoming Events

1.1. **Actor:** Students

1.2. **Purpose:**

This use case is for users to explore upcoming events organized by various clubs at IIITD on the platform's main landing page.

1.3. **Event Flow:**

1.3.1. User lands on the homepage of the website.

1.3.2. User views the list of upcoming events displayed on the main landing page.

1.3.3. If desired, the user can click on the "Home" button to refresh or return to the main landing page showcasing upcoming events.

1.4. **Special/Exceptional Requirements:**

None for this use case.

## 2. Exploring Upcoming Events

2.1. **Actor:** Students

2.2. **Purpose:**

This use case is for users to explore and obtain information about the various clubs registered at IIIT Delhi.

2.3. **Event Flow:**

2.3.1. User clicks on the "Clubs" button on the navigation bar.

2.3.2. User is redirected to the clubs' information page.

2.3.3. On this page, for each club, the user can view the club information.

2.4. **Special/Exceptional Requirements:**

None for this use case.

## 3. Users Log-In

3.1. **Actor:** Students, College Admin, Club Coordinators, Student Council Club Coordinator

3.2. **Purpose:**

This use case is for users to log in to the platform via the Google API from the main landing page.

3.3. **Event Flow:**

3.3.1. User navigates to the main landing page of the portal.

3.3.2. User clicks on the login button.

3.3.3. User is redirected to log in through the Google API.

3.3.4. After successful login, user is redirected back to the main landing page.

3.4. **Special/Exceptional Requirements:**

3.4.1. After successful login, the login button is replaced with logout button.

## 4. Registering for Events

- 4.1. **Actor:** Students
- 4.2. **Purpose:**  
To allow users to register for upcoming events.
- 4.3. **Event Flow:**
  - 4.3.1. User explores upcoming events from the main landing page.
  - 4.3.2. User clicks on an event to view its details.
  - 4.3.3. User clicks on the "Register" button.
  - 4.3.4. If logged in, user is registered and redirected to the homepage.
- 4.4. **Special/Exceptional Requirements:**
  - 4.4.1. If not logged in, user is prompted to log in.

## 5. Viewing the Profile

- 5.1. **Actor:** Students, College Admin, Club Coordinators, Student Council Club Coordinator
- 5.2. **Purpose:**  
To allow users to view their personal profile, which displays their details and the events they've registered for.
- 5.3. **Event Flow:**
  - 5.3.1. From the main landing page, user clicks on the "Profile" button in the navigation bar.
  - 5.3.2. Users, if logged-in, are redirected to their respective profile page.
  - 5.3.3. The user sees their name, roll number, email id, and profile type badge.
  - 5.3.4. The user can view the events they've previously registered for.
- 5.4. **Special/Exceptional Requirements:**
  - 5.4.1. If not logged in, user is prompted to log in.
  - 5.4.2. Profile type badges have specific classifications:
    - 5.4.2.1. Student: Regular students.
    - 5.4.2.2. Club Head: Club coordinators/heads for clubs at IIIT Delhi.
    - 5.4.2.3. Student Council Clubs Coordinator: Designated two Student Council Clubs Coordinators.
    - 5.4.2.4. Admin: Administrative personnel and DoSA.

## 6. Proposing an Event

- 6.1. **Actor:** Club Coordinators/Heads
- 6.2. **Purpose:**  
To allow coordinators/heads of various clubs to propose the organization of events.
- 6.3. **Event Flow:**
  - 6.3.1. User lands on the homepage and clicks on the "Clubs" option in the navigation bar, redirecting to the clubs' information page to locate and select their respective club from the list.
  - 6.3.2. On the club-specific page, the user clicks on the 'Propose Event' button post which a form appears.
  - 6.3.3. After filling out this form, the user clicks the "Submit" button.

- 6.3.4. The event proposal is sent for approval, and the user is redirected back to the club information page.
  - 6.4. **Special/Exceptional Requirements:**  
None for this use case.
7. **Editing Clubs' Information**
  - 7.1. **Actor:** Club Coordinators/Heads, Student Council Clubs Coordinator, Admin (Admin Personnel or DoSA)
  - 7.2. **Purpose:**  
To allow specific roles to edit the information of the clubs.
  - 7.3. **Event Flow:**
    - 7.3.1. **For a Club Coordinator/Head:**
      - 7.3.1.1. Club Coordinator/Head selects their club from the "Clubs" page.
      - 7.3.1.2. Clicks the 'Edit Club Information' button on the club-specific page.
      - 7.3.1.3. Edits the club description and members list.
      - 7.3.1.4. Clicks the "Save" button.
    - 7.3.2. **For the Student Council Clubs Coordinator and Admin:**
      - 7.3.2.1. Chooses the 'Manage' option from the navigation bar.
      - 7.3.2.2. Selects 'Edit Club Information' from management options.
      - 7.3.2.3. Chooses the desired club and edits relevant fields.
      - 7.3.2.4. Clicks the "Save" button.
  - 7.4. **Special/Exceptional Requirements:**
    - 7.4.1. Only Club Coordinator/Head can see the club-specific 'Edit' button.
    - 7.4.2. The Student Council Clubs Coordinator and Admin access editing through the 'Manage' option.
8. **Approving Event Proposals**
  - 8.1. **Actor:** Student Council Clubs Coordinator
  - 8.2. **Purpose:**  
To evaluate and approve or reject event proposals from club coordinators/heades.
  - 8.3. **Event Flow:**
    - 8.3.1. Student Council Clubs Coordinator selects the 'Manage' option after logging in.
    - 8.3.2. Chooses 'Pending Event Requests' from the available options.
    - 8.3.3. Views a list of pending proposals and selects one to review its details.
    - 8.3.4. Decides to 'Approve' or 'Reject' the event.
  - 8.4. **Special/Exceptional Requirements:**  
None for this use case.
9. **Changing the Student Council Clubs Coordinator**
  - 9.1. **Actor:** Admin (Admin Personnel or DoSA)
  - 9.2. **Purpose:**  
To change the details and assign the role of Student Council Clubs Coordinator to a new individual.
  - 9.3. **Event Flow:**

- 9.3.1. Admin logs in and selects the 'Manage' option from the navigation bar and chooses the 'Update Student Council Clubs Coordinator' option.
- 9.3.2. Views current Student Council Clubs Coordinator's details and clicks on "edit" and updates the required details.
- 9.3.3. Saves the changes, updating access and profile badges for the current and new coordinators.

**9.4. Special/Exceptional Requirements:**

- 9.4.1. The Student Council Clubs Coordinator cannot see or access this specific management option.

**10. Requesting the Formation of a New Club**

**10.1. Actor:** Students

**10.2. Purpose:**

To propose the formation of a new club at IIIT Delhi.

**10.3. Event Flow:**

- 10.3.1. User selects the 'Clubs' option on the homepage and lands on the clubs' information page.
- 10.3.2. Clicks on 'Propose a New Club' and fills out the form.
- 10.3.3. Submits the form, sending the request forward for approval.

**10.4. Special/Exceptional Requirements:**

None for this use case.

**11. Approving New Club Requests**

**11.1. Actor:** Student Council Clubs Coordinator, Admin

**11.2. Purpose:**

To evaluate and approve/reject new club formation proposals at IIIT Delhi.

**11.3. Event Flow:**

- 11.3.1. User(Student Council Clubs Coordinator) logs in, selects 'Manage', and navigates to 'Pending New Club Requests'.
- 11.3.2. Reviews and decides to 'Approve' or 'Reject' a specific club proposal. Approved proposals are made available for Admin review.
- 11.3.3. Admin reviews and finalizes the decision by either approving, thereby adding the new club to the portal, or rejecting.

**11.4. Special/Exceptional Requirements:**

- 11.4.1. Only proposals approved by the Student Council Clubs Coordinator are visible to the Admin.

**Glossary of Terms:**

1. Users: Those who will use the application.
2. Students: Users who study at IIIT Delhi and are not part of the management of the university.
3. General students: Users who aren't part of the management. They are the primary stakeholders of the application.

4. Club coordinators: Users who are part of the management, albeit at a lower level. They are responsible for managing the club activities and hosting events.
  5. Student council club coordinator: They are student users responsible for managing and approving the events added by club coordinators/heads.
  6. DoSA: Department of Student Affairs at the university.
  7. FMS: Facilities Management Services at IIIT Delhi.
  8. Admin: The user can change logins and credentials, and manage the application.
  9. Login: Sign into the application and let it know your details.
  10. Explore: Browse through the events given.
  11. Registering: Marking that the user 'may' be present at the event.
  12. Participation: Participating in an event, showing interest, and attending when it is organised.
  13. Credentials: information required for logging in; in this case, it is the Google account associated with the institute.
  14. Request: It is for requesting allowance to conduct an event.
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