SRS for Student Clubs Event Management Platform

1. 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.

2. 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).

3. Functional Requirements:

3.1. All IIITD domain users should be able to log into the platform using their IIITD domain Gmail IDs. (all)
3.2. 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)
3.3. 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)
3.4. 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)
3.5. 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)
3.6. Students should be allowed to search for upcoming events based on their interests and view them. (all)
3.7. 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)
3.8. There should be a report feature in the platform to enable everyone to report incidents and issues with the platform. (all)
3.9. Students should be able to request for the formation of a new club. (all).
3.10. 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)

4. Performance Requirements:

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

5. Design Constraints:

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

6. External Interfaces:
6.1. The platform should be compatible with all major browsers like Safari, Chrome, Firefox, Brave, Microsoft Edge, etc.
6.2. 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.
6.3. The platform should be able to send email notifications to all students and other users.
7. Security Requirements:
7.1. 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.
7.2. The platform should prevent packet interception and tampering with outgoing and incoming requests.
7.3. The platform should verify users using 2-factor authentication and IIIT Delhi domain login should be implemented using Google's API.
7.4. The user data should be stored and maintained as per the institute's policy.

8. Glossary of Terms:
8.1. Users: Those who will use the application.
8.2. Students: Users who study at IIIT Delhi and are not part of the management of the university.
8.3. General students: Users who aren't part of the management. They are the primary stakeholders of the application.
8.4. 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.
8.5. Student council club coordinator: They are student users responsible for managing and approving the events added by club coordinators/heads.
8.6. DoSA: Department of Student Affairs at the university.
8.7. FMS: Facilities Management Services at IIIT Delhi.
8.8. Admin: The user can change logins and credentials, and manage the application.
8.9. Login: Sign into the application and let it know your details.
8.10. Explore: Browse through the events given.
8.11. Registering: Marking that the user 'may' be present at the event.
8.12. Participation: Participating in an event, showing interest, and attending when it is organised.
8.13. Credentials: information required for logging in; in this case, it is the Google account associated with the institute.
8.14. Request: It is for requesting allowance to conduct an event.