

FUSION ERP

SOFTWARE REQUIREMENTS SPECIFICATIONS

MODULE: SA-3 GYMKHANA (WEB)

FACULTY MENTOR –

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1. Introduction

1.1 Introduction about the Fusion

Fusion ERP is an Online Web Service Portal which provides a centralized platform for accessing, collecting, and managing the various services related to an institutes operations related to the student body such as :

- Course Registration and Management
- Mess Committee
- Gymkhana
- Examination
- Hostel Management
- Placement Cell
- Primary Health Centre (PHC)

and the variety of other departments which are involved in the activities of the students as well as those departments which support these major departments.

1.2 Purpose of Gymkhana Web module

The gymkhana web module is the part of the online web service portal which is responsible for the following:

1. Viewing the details of all the club details including their activity calendar, the current coordinator and co-coordinator.
2. Submitting applications for new clubs, as well as applying to be a member of exiting clubs. The module features detailed forms to facilitate such services.
3. The user (Student, faculty) can also view the ongoing or upcoming club sessions and events.
4. The user can also access the public details related to the members of the clubs (both current and previous).
5. The user can participate in elections, ask for nominations for head figures in a club

1.3 *Scope of the Module*

Functionalities :

- Hold Elections
- Ask for Nominations
- View Club Details
- View Member Records
- Formation new club
- Applying for membership of clubs
- Appointment of the Coordinators of Clubs
- Allocation of Budget to the Clubs
- Create and View Club Sessions and Events

Actors :

- Dean
- Counsellor
- Convener
- Club Coordinator
- Student

2. User/Actor Description (Characteristics)

2.1 Dean

- **View budget:** Gain a comprehensive view of the club's financial landscape, ensuring fiscal responsibility and strategic resource allocation.
- **Generate reports:** Access detailed reports to evaluate the club's performance and contributions, facilitating informed decision-making.
- **View position holders:** Easily view and acknowledge outstanding contributors within the club, recognizing and appreciating their efforts.

2.2 Counsellor

- **Manage clubs:** Facilitate and guide the growth of clubs, ensuring they align with the institution's values and goals.
- **View & Update budget:** Monitor and update the financial aspects of the clubs, promoting responsible resource management.
- **Generate report:** Access insightful reports for an in-depth understanding of club dynamics and contributions.
- **Manage position holders:** Acknowledge and support outstanding contributors, fostering a culture of recognition and motivation.
- **View club members:** Easily access and manage club members, fostering a sense of inclusivity and engagement.
- **View event calendar:** Stay connected with club activities by viewing members, events, and calendars, promoting holistic student development.

2.3 Convenor

Sub Actors -

1. Cultural convenor
2. Sports convenor
3. Technical convenor

- **View event calendar:** Stay informed about upcoming events, ensuring effective planning and coordination between different club sectors.
- **View club members:** Easily access and manage club members, fostering a sense of inclusivity and engagement.
- **Budget allocation & utilization:** Efficiently allocate and monitor budgetary resources to optimize the impact of cultural, sports, and technical events.
- **Generate reports:** Access detailed reports to assess the success of events and identify areas for improvement.
- **Make announcements:** Effectively communicate updates and critical information to members, creating a cohesive and informed community.

2.4 Club Coordinator

- **Manage all the club members:** Effortlessly oversee and engage with all club members, fostering a sense of community and participation.
- **Manage calendar:** Seamlessly organize and coordinate club activities, ensuring a well-planned and dynamic schedule.
- **Manage club activities:** Streamline the execution of club activities, from planning to execution, to enhance the overall club experience.
- **Generate reports:** Access comprehensive reports for insightful analysis, aiding in data-driven decision-making for continuous improvement.
- **Make announcements:** Effectively communicate updates and vital information to the entire club, fostering transparency and engagement.

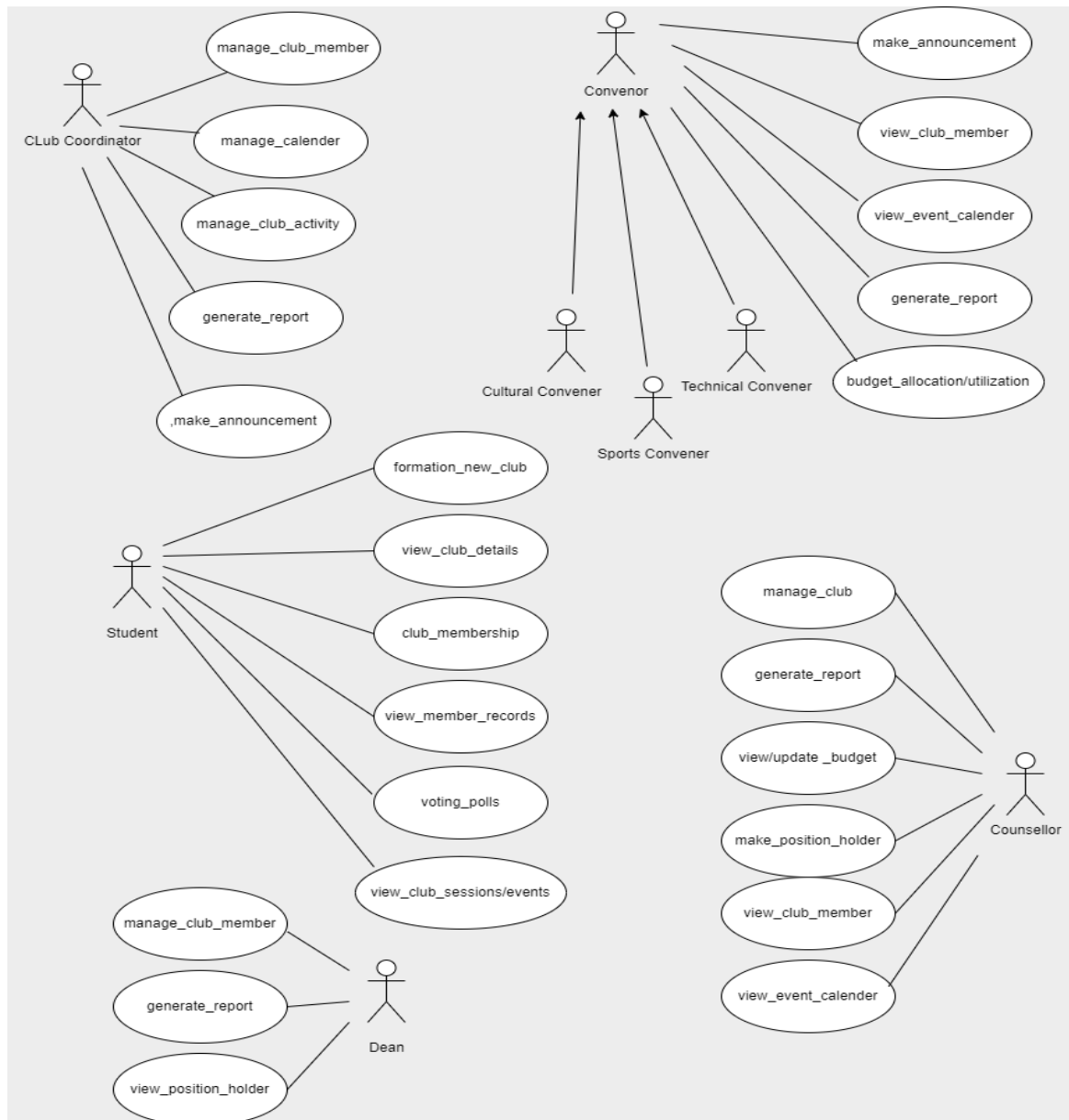
2.5 Student

- **Formation of new clubs:** Users can initiate the creation of new clubs, providing details like name and purpose for others to join.

- **Applying for membership of existing clubs:** Interested individuals can apply for membership in established clubs by submitting relevant information and meeting criteria.
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3. Functional Requirements

3.1 Use Case Diagram



3.2 Use Case Description

3.2.1 Dean

UC ID	UC#1	
Use case Name	manage_club_member	
Description	Maintains an accurate and up-to-date database of club members	
Actor	Dean	
Precondition	Club should exist	
Main Flow	1.	The Club Coordinator facilitates the enrolment of new members, ensuring they follow proper registration procedures. Existing members are encouraged to renew their memberships, with the coordinator overseeing the renewal process.
	2.	Maintaining an up-to-date member database, including contact details and membership status. Tracking and recording member attendance at meetings and events.
Post Condition	The club's membership database is updated with accurate information, including new enrolments and membership renewals. Members are well-informed about the latest club updates, events, and relevant information through effective communication channels.	
Alternate Flow		
Sub Flow		
Global Alternate Flow		

UC ID	UC#2	
Use case Name	generate_report	
Description	generate reports that provide insights into various aspects of club activities, membership, and performance for effective decision-making and planning.	
Actor	Dean	
Precondition	Relevant data, including membership information, event details, and financial records, is available in the system.	
Main Flow	1.	The Dean(S) defines the parameters for the report, specifying the time range, type of report (e.g., membership, financial, event attendance), and any specific criteria.

	2.	The Dean(S) may choose to export the report in various formats (e.g., PDF, Excel) or share it with club leaders and members through the club management system or other communication channels.
Post Condition	The Dean(S) utilizes the report to make informed decisions for the improvement and growth of the club. If shared, club leaders and members have access to relevant information for transparency and collaboration.	
Alternate Flow		
Sub Flow		
Global Alternate Flow		

UC ID	UC#3	
Use case Name	view_position_holder	
Description	Can view the Coordinator and Co-Coordinator of the Clubs	
Actor	Dean	
Precondition	Club should exist	
Main Flow	1.	Easily view and acknowledge outstanding contributors within the club, recognizing and appreciation.
Post Condition		
Alternate Flow		
Sub Flow		
Global Alternate Flow		

3.2.2 Counsellor

UC ID	UC#1	
Use case Name	manage_club	
Description	Counselor should accept/reject the new clubs that are forwarded by Convenor	
Actor	Counselor	
Precondition	Club should not exist	
Main Flow	1.	Students can propose the formation of new clubs to the convenor with proper documentation of funds required for the club and what is the purpose of the club.
	2.	Then the application is forwarded to the Counselor through the Convenor for the final approval
Post Condition	Club is formed and then coordinators, co-coordinators, and faculty incharge are to be selected. Students are notified accordingly.	
Alternate Flow		
Sub Flow		
Global Alternate Flow		

UC ID	UC#2	
Use case Name	generate_report	
Description	The event report of the event or the fest will be sent to the counselor by the dean	
Actor	Counselor	
Precondition	There should be an event being conducted in the college.	

Main Flow	1.	The dean students will send the event report to the counselor.
	2.	The counselor will be notified.
Post Condition	There should be an event being conducted in the college.	
Alternate Flow		
Sub Flow		
Global Alternate Flow		

UC ID	UC#3	
Use case Name	view/update_budget	
Description	The budget of the event or any thing will be sent to the counselor by the dean	
Actor	Counselor	
Precondition	There should be a valid reason to view or update the budget.	
Main Flow	1.	The counselor will update the budget according to necessity.
	2.	The budget will be updated.
Post Condition	The budget will be utilized accordingly.	

Alternate Flow	If budget is not proper ask dean to resubmit it	
Sub Flow		
Global Alternate Flow		

UC ID	UC#4	
Use case Name	make_position_holder	
Description	The counselor will be able to assign coordinator and coordinator responsibilities to students.	
Actor	Counselor	
Precondition	There should be a valid club for which counselor assign different roles.	
Main Flow	1.	After the time period of the coco and co has been completed so the counselor changes the designation
	2.	Counselor sets the new student as the co and the coco.
Post Condition	Students are notified accordingly.	
Alternate Flow	If something went wrong or the Counselor has some objection against the changes then the convenor is notified and is requested to re enter the new co and coco.	
Sub Flow		
Global Alternate Flow		

UC ID	UC#5	
Use case Name	view_club_members	
Description	This shows all the details of the club members associated with a particular club.	
Actor	Counselor	
Precondition	There should be a valid club with associated club members.	
Main Flow	1.	The counselor selects the club to see the members of respected clubs.
	2.	The list of members of clubs is shown.
Post Condition	The budget will be utilized accordingly.	
Alternate Flow		
Sub Flow		
Global Alternate Flow		

UC ID	UC#6	
Use case Name	view_event_calender	
Description	This shows all the details of the events happening in college.	
Actor	Counselor	
Precondition	The event calendar is already uploaded on portal.	
Main Flow	1.	The counselor views the timeline of upcoming events in the college.
	.	
Post Condition		
Alternate Flow		
Sub Flow		
Global Alternate Flow		

3.2.3 Convenor

UC ID	UC#1	
Use case Name	make_announcement	
Description	Creates and publish any new announcement using the notification module	
Actor	Convenor	
Precondition	Convener must be logged in using the credentials provided	
Main Flow	1.	Convener logs into the fusion portal
	2.	Uses the provided form to create a new notification
	3.	Pushes the new notification to dashboard by add button
Alternate Flow		
Sub Flow		
Global Alternate Flow		

UC ID	UC#2	
Use case Name	view_club_members	
Description	Convener can view the registered club members	
Actor	Convener	
Precondition	Club must exist	
Main Flow	1.	Convener can view the details of the registered student for a specific club
Alternate Flow		If club does not exist new club can be added
Sub Flow		
Global Alternate Flow		

UC ID	UC#3	
Use case Name	View/update_activity_calendar	
Description	Make the activity calendar of the college and upload it on the portal	
Actor	Convener	
Precondition	All events need to be decided and their dates need to be fixed	
Main Flow	1.	Conveners and councellors make the event calendar listing all the fest dates and further club activities
	2.	Dean(S) approves the calendar and publish it.
Post Condition	Activities should not clash with each other and other academic affairs or semester examination.	
Alternate Flow	if any event clashes then it need to be changed	
Sub Flow		
Global Alternate Flow		

UC ID	UC#4	
Use case Name	Generate_report	
Description	Reports of each event are created and submitted to co-ordinator and co-coordinator by convenor	
Actor	Convenor	
Precondition	Event report should be created by convenor	
Main Flow	1.	Event report is created by convenor which contains detailed information of the event such as date, time, etc.
	2.	This report is submitted to co-ordinator and co_coordinator by convenor

Post Condition	In case of any clash it needs to be rectified by discussing with club co-ordinators	
Sub Flow		
Global Alternate Flow		

UC ID	UC#5	
Use case Name	Budget_allocation/utilization	
Description	Convener has to check the proper utilization and allocation for club need in accordance to the event	
Actor	Convener	
Precondition	Need must exist for approval of new budget	
Main Flow	1. 2.	Convener has to check the need of the cub Convener has to forward Budget to the higher authorities for the approval Pass Budget if it is in accordance Budget to the higher authorities for
Alternate flow		If the budget does not match with the needs of the club it must be discussion with club members Changed according to the
Post Condition	Budget will be allotted when approved by Senate	
Sub Flow		
Global Alternate Flow		

3.2.4 Club Coordinator

UC ID	UC#1	
Use case Name	manage_club_member	
Description	Maintains an accurate and up-to-date database of club members	
Actor	Club-coordinator	
Precondition	Club should exist	
Main Flow	1.	The Club Coordinator facilitates the enrolment of new members, ensuring they follow proper registration procedures. Existing members are encouraged to renew their memberships, with the coordinator overseeing the renewal process.
	2.	Maintaining an up-to-date member database, including contact details and membership status. Tracking and recording member attendance at meetings and events.
Post Condition	The club's membership database is updated with accurate information, including new enrolments and membership renewals. Members are well-informed about the latest club updates, events, and relevant information through effective communication channels.	
Alternate Flow		
Sub Flow		
Global Alternate Flow		

UC ID	UC#2	
Use case Name	manage_calender	
Description	To efficiently manage and coordinate club events and activities through an organized and up-to-date calendar.	
Actor	Club-coordinator	
Precondition	The Club Coordinator has access to the club management system.	
Main Flow	1.	The coordinator initiates the scheduling of new events, meetings, or activities by providing necessary details such as title, date, time, venue, and any relevant notes.

		The system updates the calendar with the newly scheduled event, ensuring it is visible to all club members.
	2.	The coordinator configures notifications for upcoming events to be sent to club members, ensuring they are well-informed in advance.
Post Condition	<p>The club calendar is up-to-date, reflecting all scheduled events, meetings, and activities.</p> <p>Collaboration with club leadership ensures that the calendar aligns with the overall vision and goals of the club.</p>	
Alternate Flow		
Sub Flow		
Global Alternate Flow		

UC ID	UC#3	
Use case Name	manage_club_activity	
Description	To efficiently plan, organize, and oversee various club activities.	
Actor	Club-coordinator	
Precondition	The Club Coordinator has access to the club management system.	
Main Flow	1.	For each planned activity, the coordinator provides details such as the name, date, time, location, purpose, and any specific requirements.
	2.	The coordinator sets up a registration system for members to sign up and participate in the activities.
Post Condition	The club calendar is updated to reflect the completion of activities.	
Alternate Flow		
Sub Flow		

Global Alternate Flow		
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UC ID	UC#4	
Use case Name	generate_report	
Description	generate reports that provide insights into various aspects of club activities, membership, and performance for effective decision-making and planning.	
Actor	Club-coordinator	
Precondition	Relevant data, including membership information, event details, and financial records, is available in the system.	
Main Flow	1.	The coordinator defines the parameters for the report, specifying the time range, type of report (e.g., membership, financial, event attendance), and any specific criteria.
	2.	The coordinator may choose to export the report in various formats (e.g., PDF, Excel) or share it with club leaders and members through the club management system or other communication channels.
Post Condition	The coordinator utilizes the report to make informed decisions for the improvement and growth of the club. If shared, club leaders and members have access to relevant information for transparency and collaboration.	
Alternate Flow		
Sub Flow		
Global Alternate Flow		

UC ID	UC#5	
Use case Name	make_announcement	
Description	Announcement of important information, updates to club members through the club management system.	
Actor	Club-coordinator	
Precondition	Relevant information or announcements are available for communication.	
Main Flow	1.	<p>The coordinator creates a new announcement, including the title, content, and any relevant details such as date, time, or associated events.</p> <p>The coordinator determines the target audience for the announcement, such as all members, specific committees, or leaders, ensuring that the information is directed appropriately.</p>
	2.	Club members receive notifications through the club management system
Post Condition	Club members are informed and notified about the announcement through appropriate channels.	
Alternate Flow		
Sub Flow		
Global Alternate Flow		

3.2.5 Student

UC ID	UC#1	
Use case Name	new_club_form	
Description	proposal for the formation of new club	
Actor	Student	
Precondition	Club should not exist	
Main Flow	1.	Students can propose the formation of new clubs to the convenor with proper documentation of funds required for the club and what is the purpose of the club.
	2.	Then the application is forwarded to the Dean (S) through the counsellors for the final approval
Post Condition	Club is formed and then coordinators, co-coordinators, and faculty incharge are to be selected	
Alternate Flow		
Sub Flow		
Global Alternate Flow		

UC ID	UC#2	
Use case Name	view_club_details	
Description	this shows the details of the all the clubs present in the gymkhana who are the co ordinators , co coordinators etc..	
Actor	Students, dean students,mess incharge,counsellors	
Precondition	There should be representative from every batch	
Main Flow	1.	the actor selects the club to which he wants to know the info about
	2.	The data of the respective club will be shown
Post Condition		
Alternate Flow		

Sub Flow	
Global Alternate Flow	

UC ID	UC#3	
Use case Name	club_membership_form	
Description	Form for getting enrolled in a club	
Actor	Student	
Precondition	Club should exist	
Main Flow	1.	Student who are interested to get enrolled in a particular club, fills this form.
	2.	Student information is verified and student is enrolled in that club.
Post Condition	Student is enrolled in that club and his information is updated in members record.	
Alternate Flow		
Sub Flow		
Global Alternate Flow		

UC ID	UC#4	
Use case Name	view_club_members	
Description	Convener can view the registered club members	
Actor	Student	
Precondition	Club must exist	

Main Flow	1.	Convener can view the details of the registered student for a specific club
Alternate Flow		If club does not exit new club can be added
Sub Flow		
Global Alternate Flow		

UC ID	UC#5	
Use case Name	vooting_polls	
Description	Students can cast their votes for various elections held like senate election.	
Actor	Student	
Precondition	Candidate for whom the vote is casted should exist.	
Main Flow	1.	Election candidate should be verified and listed
	2.	student can cast their votes for verified and listed candidate only
Post Condition	candidates count of vote increase	
Alternate Flow		
Sub Flow		
Global Alternate Flow		

UC ID	UC#6	
Use case Name	View_club_sessions	
Description	Students can view the time table for the club sessions and events	

Actor	Student	
Precondition	Student must exist in the club records	
Main Flow	1.	Student can view the club sessions and events of the registered club
	2.	Attendance(RSVP) can be done through the fusion portal gymkhana page
Post Condition		
Alternate Flow		
Sub Flow		
Global Alternate Flow		

3.3 Other Functional Requirements

3.3.1 Notification Module

The Notification module is responsible for managing and disseminating important information within the organization. It facilitates the sending of notifications related to event approvals, join requests, critical updates, and other relevant announcements. Notifications are prominently displayed on the dashboard for immediate attention.

3.3.2 Role Assignment by Super Admin

This functionality enables the Super Admin to assign specific roles to counsellors, co-coordinators, and coordinators. Super Admin has the authority to define and modify the responsibilities associated with each role, ensuring a structured and organized hierarchy within the system.

3.3.3 Display of New Messages on Dashboard

The system must dynamically showcase new messages on the dashboard, providing users with a quick overview of recent communications. This ensures that important

messages are promptly noticed and attended to by the relevant users.

3.3.4 Approval-Based Addition of New Students to Clubs

New students can be added to clubs only after approval, enhancing the control over club membership. This feature involves an approval process, ensuring that only eligible students are integrated into the respective clubs.

3.3.5 Alerts for Critical Inventory Levels and Updates

The module includes an alert system that notifies administrators and relevant personnel about critical inventory levels and other essential updates. This ensures timely actions are taken to address inventory shortages or other important matters.

3.3.6 Participation in Voting Polls

The system allows users, especially club members, to actively participate in voting polls. This feature fosters engagement and democratic decision-making within the organization.

3.3.7 View Club Members

Users with the appropriate permissions can access and view the list of members within a specific club. This feature facilitates effective club management and communication among members.

3.3.8 View Club Information and Sessions

Users, depending on their roles, can view detailed information about clubs, including their purpose, activities, and upcoming sessions. This feature promotes transparency and awareness among club members regarding scheduled events and club-related information.

3.4 Other Constraints

3.4.1 User Interfaces

The user interface should comply with the colour scheming and dashboard design of the FUSIONIIT. Users should be able to navigate from one functionality to other. Inter module navigation should be smooth. All the functionalities should be easy to use, and no specific training should be required for the usage of the module

3.4.2 Tech Stack Used

Python, Django, PostgreSQL

3.4.3 Business Rules

Club Members Enrolment Based on Registration Fees:

Club members must pay the specified registration fees before joining a club. This rule ensures financial transparency and fair access to club benefits, contributing to the sustainable operation of clubs within the organization.

Appointment of Club Coordinators and Coordinators Based on Majority Criteria:

Club coordinators and coordinators are appointed based on a majority criteria set by the academic section. Through a voting or approval process, candidates with majority support assume leadership roles, promoting a democratic and participatory approach in selecting individuals for these positions.

4. Non-Functional Requirements

4.1 Performance

A college portal's performance is a crucial non-functional need that guarantees the system reacts quickly to user input. This calls for low downtime, speedy page loads, and effective data processing. The smooth and responsive user experience that an optimized performance ensures is crucial for staff, instructors, and students who depend on the portal for a variety of administrative and academic activities.

4.2 Security

For a college portal handling sensitive student and institutional data, security is critical. It is imperative to put strong security measures in place to guard against data breaches, unauthorized access, and other cyberthreats. These measures include encryption, authentication, and access controls. Reliability and privacy of the data kept in the portal are contingent upon a strong security framework.

4.3 Usability

Usability is centred on how easy it is to use the college portal. Users of all technical skill levels can engage with the portal effectively thanks to its simple and intuitive interface. Setting usability as a top priority increases user satisfaction, lowers the learning curve, and encourages academics, administrative staff, and students to utilize the portal frequently.

4.4 Maintainability

The college portal's maintainability refers to how easily it can be updated, changed, and maintained over time. Updates, bug repairs, and the addition of new features may all be completed quickly on a well-maintained system. By doing this, you may lengthen the portal's lifecycle and save overall maintenance costs by ensuring that it can adapt to changing institutional requirements and technology improvements.

4.5 Scalability

A college portal must be scalable to handle different usage levels. The portal should be able to handle increases in traffic without experiencing any performance deterioration as the user base grows or during periods of heightened activity. To ensure that the site is future-proof and capable of keeping up with changing user demands and technology improvements, scalability is crucial.

5. Module dependencies with other fusion modules

5.1 Awards and Scholarships Module

The Awards and Scholarships module recognizes and rewards exceptional student achievements, distributing awards for academic excellence, sports accomplishments, and leadership qualities. It also oversees the allocation of scholarships, considering factors such as academic performance, financial need, and special talents.

5.2 Purchase and Store Module

Managing organizational merchandise, the Purchase and Store module ensures efficient inventory tracking, order processing, and restocking. It streamlines the procurement process, handling everything from order placement to payment and fulfilment.

5.3 Notification Module

Essential for communication, the Notification module handles the approval of join requests, sends event notifications, and serves as a centralized platform for important announcements. It keeps members informed about crucial events, decisions, and general updates.

5.4 Dashboard Module

The Dashboard module provides a centralized interface for users, displaying real-time notifications, facilitating message management, and offering an overview of recent activities and important notices. It streamlines user interactions within the organization.