

# Functional Requirements for Collaboration Learning and Academic Life Tools

## **1. User Authentication and Authorization:**

- Provide secure user registration and login functionalities.
- Differentiate between different user roles such as students, teachers, and administrators.
- Implement access control mechanisms to restrict certain functionalities based on user roles and permissions.

## **2. Course Management:**

- Allow users to create and manage courses.
- Provide options for adding course materials, assignments, and resources.
- Support course enrollment and management of students of rosters

## **3. Discussion Forums:**

- Enable users to participate in course-specific discussion forums.
- Allow users to create threads, reply to threads, and follow discussions.
- Implement search and filtering options for finding relevant discussions.

## **4. File Sharing and Collaboration:**

- Enable users to upload, share, and download files related to courses.
- Support version control for collaborative document editing.
- Provide options for commenting and annotating shared files.

## **5. Assignment Submission and Grading:**

- Allow students to submit assignments electronically.
- Provide an interface for teachers to review and grade assignments.
- Implement grading criteria and support customizable rubrics.

## **6. Calendar and Scheduling:**

- Provide a calendar view to manage academic schedules.
- Allow users to schedule events, such as classes, exams, and deadlines.
- Send notifications and reminders for upcoming events.

## **7. Notifications and Communication:**

- Implement a messaging system for real-time communication between users.
- Send notifications for course updates, assignment reminders, and discussions.
- Allow users to configure notification preferences.

## 8. Progress Tracking and Analytics:

- Provide insights into user progress and performance.
- Generate reports and analytics on student participation, grades, and achievements.
- Offer visual representations, such as charts or graphs, for easy data interpretation.

## 9. Integration with External Tools:

- Allow integration with external tools such as learning management systems, video conferencing platforms, or document collaboration tools.
- Support importing and exporting of data in standard formats.

# FLOWCHART





