Academic Affairs System - Lab 6

Group Members
1. Abhimanyu Negi - 202001080
2. Sumit Vaniya - 202001085
3. Jayraj rathwa - 202001102
4. Darsh Gopani - 202001065
5. Yash Chauhan - 202001082
6. Shubh Golus - 202001077
7. Nandini Chaudhary - 202001090
8. Kush Shah - 202001104
9. Isha Popat - 202001095

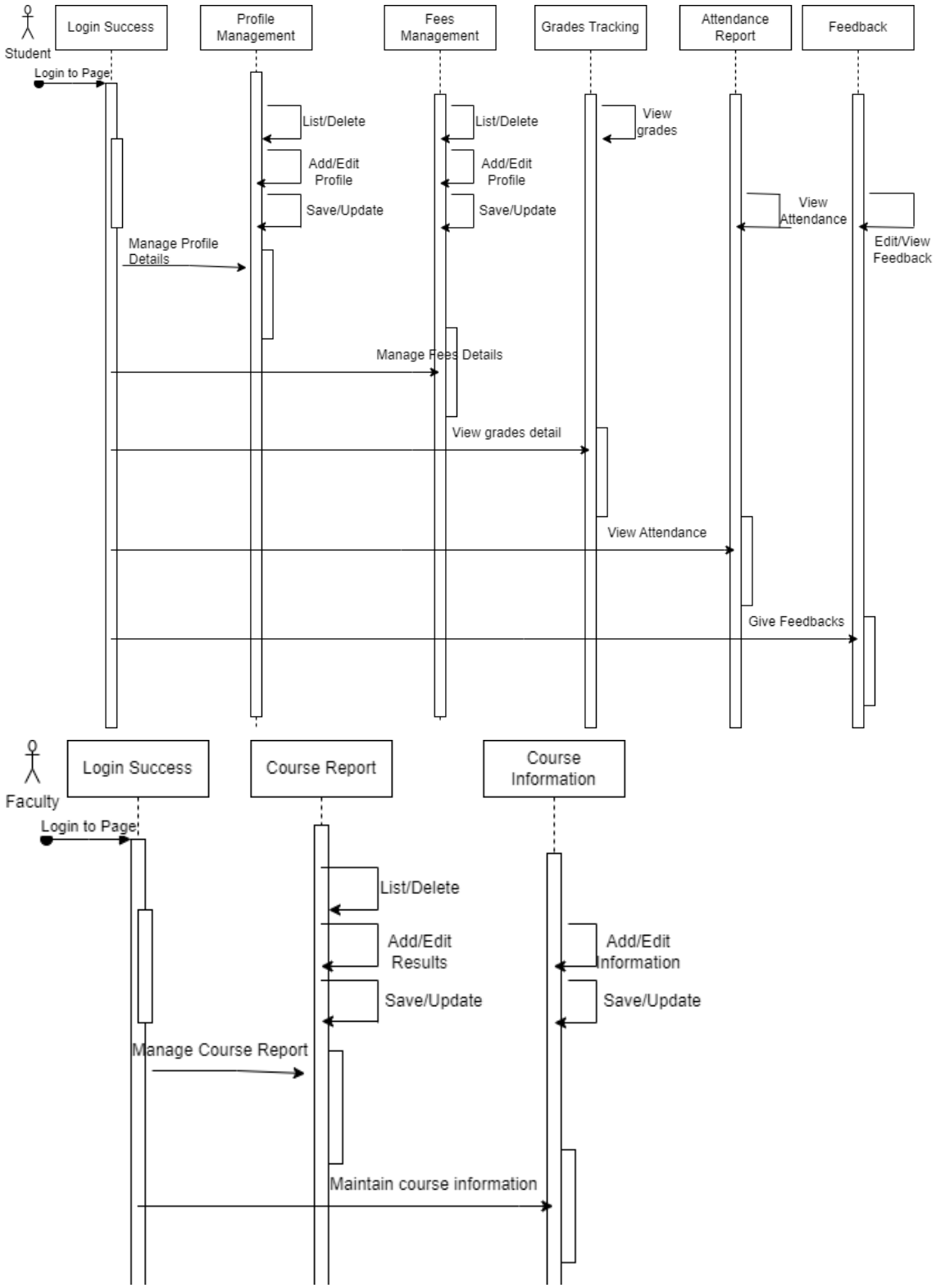
1.

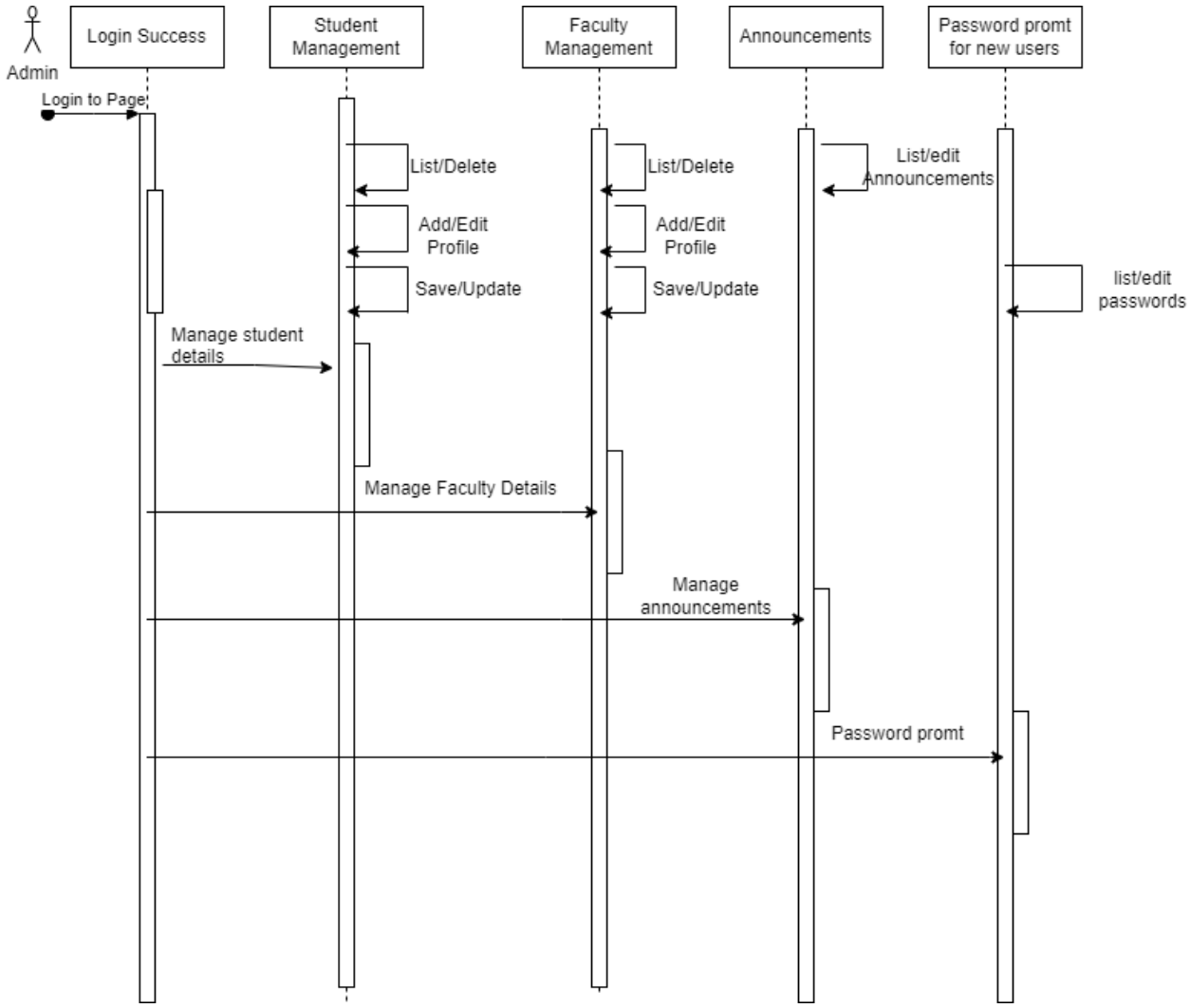
Boundary objects:
a. User Interface (UI) - The different pages of the website act as the boundary objects for the system
b. Web Browser - The user interacts with the interface via the web browser
c. Database Management System - The system accesses the database for various information to give it to the user.

Entity objects:
Course - This entity holds the information about the various courses and their materials
Announcement - Holds the broadcasted notices
Transcript - Holds the transcript information
Grade - Holds grade information for each course
Feedback - Gives out form for feedback
Personal Information - Holds personal information of the user
Attendance - Holds the attendance information
Fees Receipt - Contains information about fees

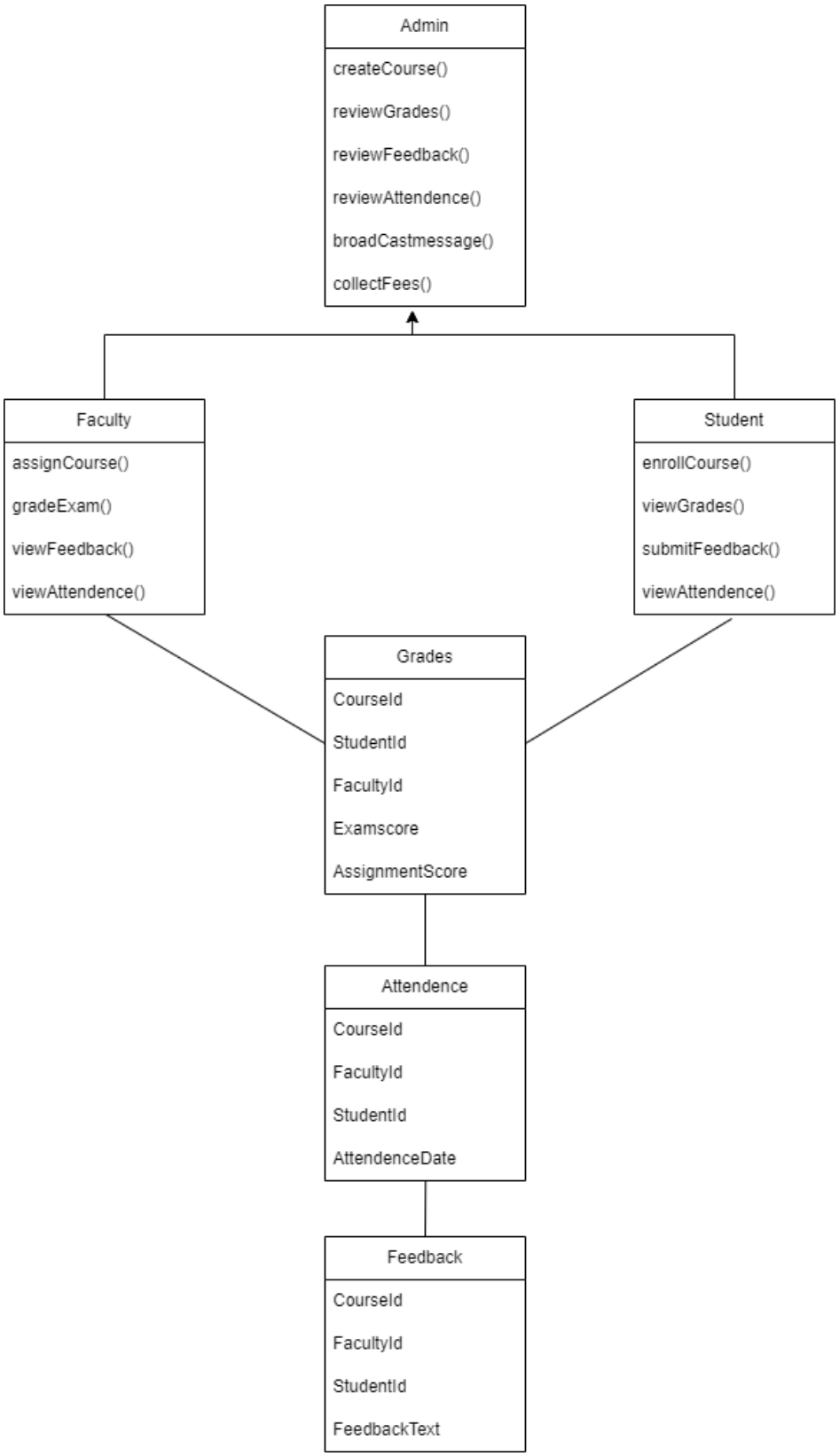
Control objects:
User Authentication
User Authorization
Database Connection Manager
Report Generator
Feedback Analyzer
Attendance Tracker
Password Manager
Broadcast Manager

2. Sequence Diagrams




Admin
Login Success
Student Management
Faculty Management
Announcements
Password promt for new users
Login to Page
List/Delete
Add/Edit Profile
Save/Update
List/Delete
Add/Edit Profile
Save/Update
List/edit Announcements
list/edit passwords
Manage student details
Manage Faculty Details
Manage announcements
Password promt

3. Class Diagram



4. Identify the design goals :

An academic affairs system is designed to support various functions related to academic administration within an educational institution. The design goals for an academic affairs system can vary depending on the specific needs and requirements of the institution, but some common design goals include:

Efficiency: The system should be designed to streamline academic administrative tasks and processes, such as course scheduling, student registration, grading, and record-keeping. This can help to save time and reduce errors.

Accuracy: The system should ensure accurate and up-to-date information for academic records, student data, and faculty data. This can help to ensure compliance with regulatory requirements and enhance the quality of academic programs.

Flexibility: The system should be flexible enough to adapt to changing academic needs and priorities. This can include the ability to add new programs, change course offerings, or modify academic policies.

Integration: The system should be designed to integrate with other institutional systems, such as financial aid, student services, and learning management systems. This can help to improve data accuracy and reduce duplication of effort.

User-friendly: The system should be user-friendly and intuitive for faculty, staff, and students to use. This can help to promote adoption and reduce the need for training and support.

Security: The system should ensure the security and confidentiality of academic data, student data, and faculty data. This can include user authentication, access control, and data encryption.

5. High Level Design

A student management system could have the following subsystems:

Student Registration Subsystem: The student registration subsystem is in charge of overseeing the course registration process.

Login subsystem: Verifying the identity of a user or other entity trying to access the system or its resources is the responsibility of the login subsystem.

Student Record Management subsystem: This subsystem would be in charge of keeping track of all student-related information, including personal data, academic records, attendance records, and disciplinary records.

Authentication Subsystem: Verifying the identity of a user or other entity trying to access the system or its resources is the responsibility of the authentication subsystem. An authentication subsystem's main responsibility is to ensure that only legitimate users or entities are permitted access to the system and that unwanted access is avoided.

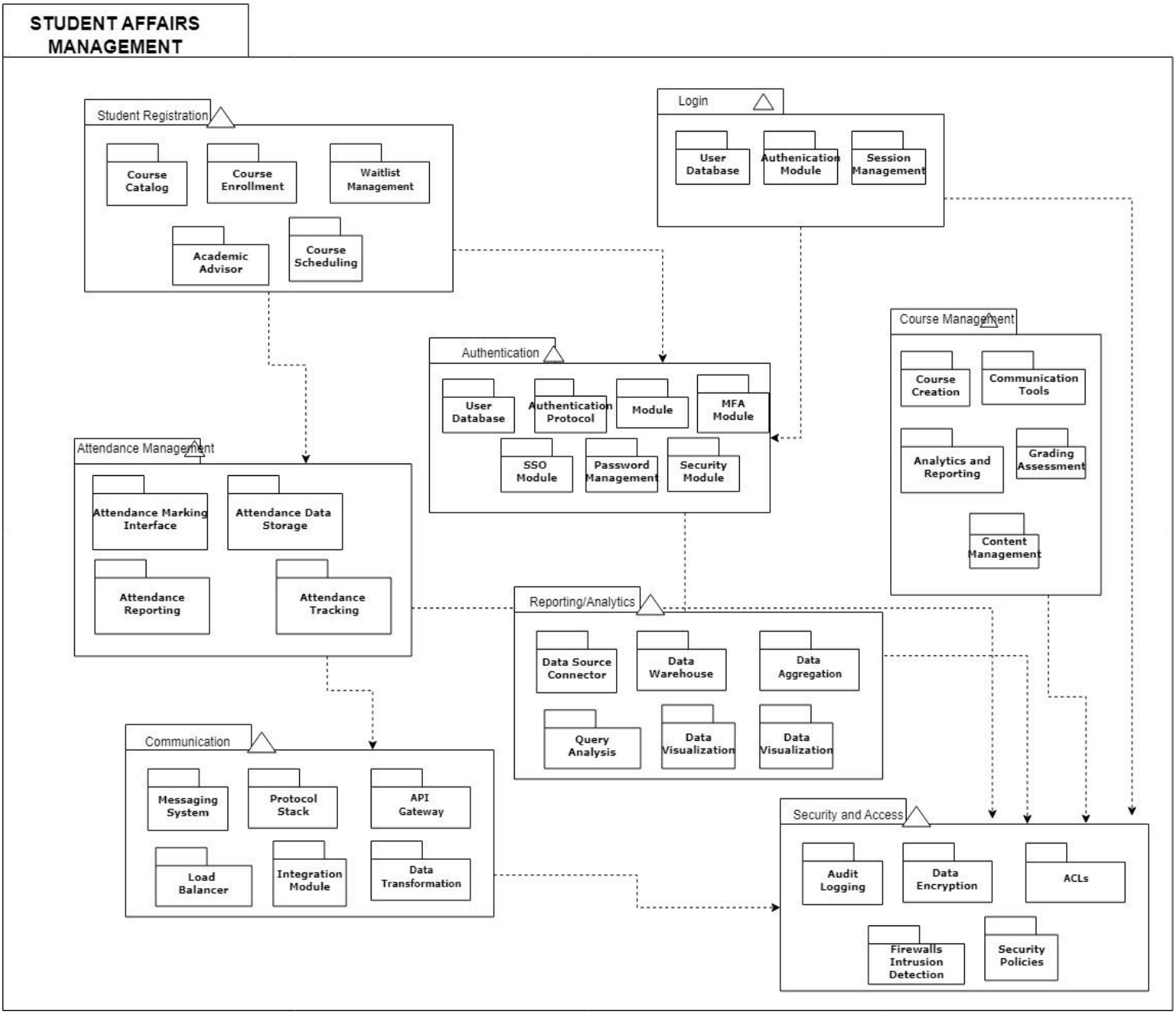
Course Management Subsystem: The course-related data, including timetables, syllabi, course materials, and assignments, would be managed by the course management subsystem.

Communication Subsystem: This subsystem would be in charge of handling email notifications, messaging, and discussion boards.

Reporting and Analytics Subsystem: This subsystem would be in charge of producing reports and analytics based on the information gathered by the other subsystems, such as attendance summaries, course evaluations, and student performance reports.

Security And Access Control Subsystem: The student management system's security and access control, including user authentication, authorization, and permission management, would be managed by the security and access control subsystem.

.


STUDENT AFFAIRS MANAGEMENT
Student Registration
Course Catalog
Course Enrollment
Waitlist Management
Academic Advisor
Course Scheduling
Login
User Database
Authenication Module
Session Management
Authentication
User Database
Authentication Protocol
Module
MFA Module
SSO Module
Password Management
Security Module
Course Management
Course Creation
Communication Tools
Analytics and Reporting
Grading Assessment
Content Management
Attendance Management
Attendance Marking Interface
Attendance Data Storage
Attendance Reporting
Attendance Tracking
Reporting/Analytics
Data Source Connector
Data Warehouse
Data Aggregation
Query Analysis
Data Visualization
Data Visualization
Communication
Messaging System
Protocol Stack
API Gateway
Load Balancer
Integration Module
Data Transformation
Security and Access
Audit Logging
Data Encryption
ACLs
Firewalls Intrusion Detection
Security Policies