

# LEARNSPHERE

- A one stop solution for learners and teachers.



# PROBLEM STATEMENT

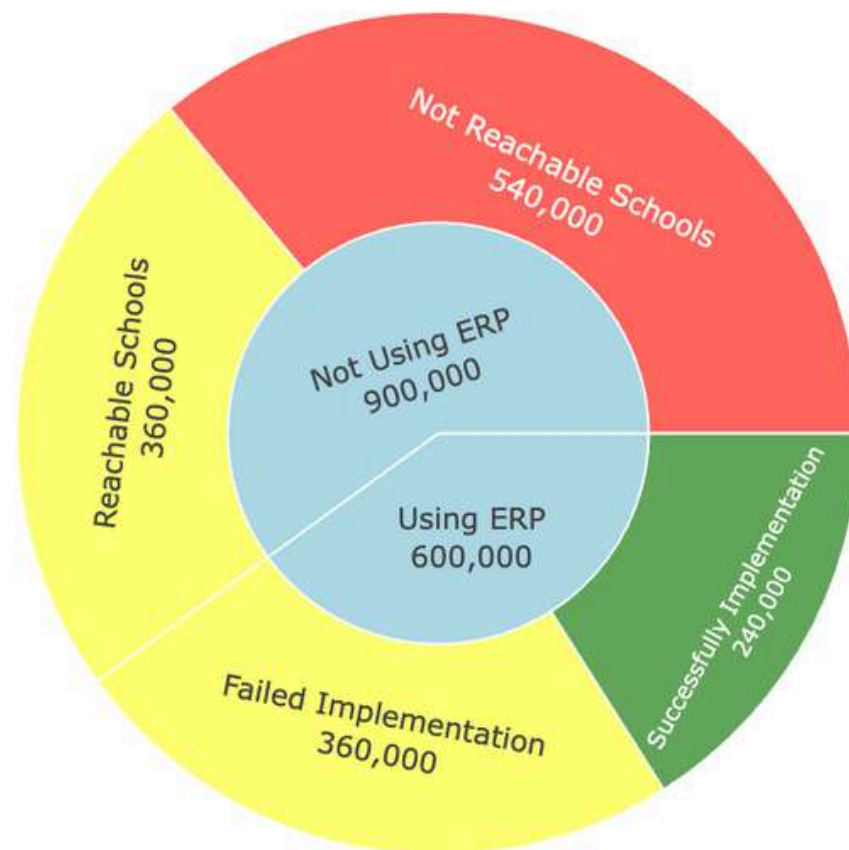
Educational institutions struggle with fragmented systems, forcing students to navigate multiple platforms as teachers use their preferred tools. This creates confusion, disrupts learning, and complicates progress tracking, while teachers face disorganized content management and assessments, reducing overall productivity.

# SOLUTION

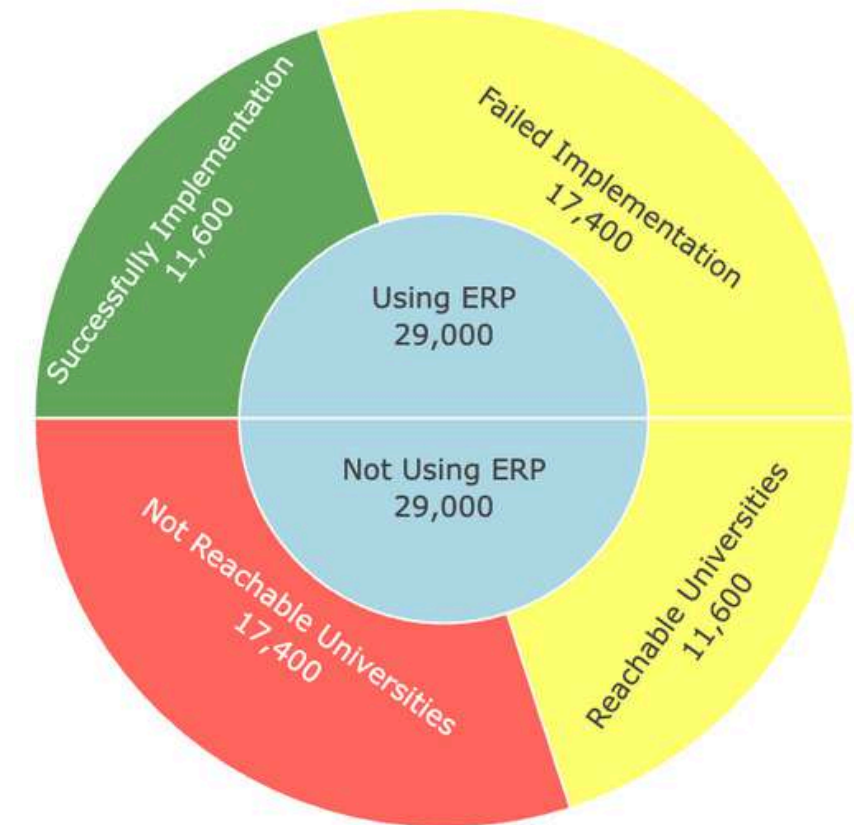
LearnSphere provides a unified platform that combines ERP and LMS, eliminating the need for multiple systems. Here, students can access learning materials, track progress, and receive feedback at one place, reducing confusion. For teachers, it streamlines content management, assessments, and student tracking, making work more efficient. By integrating everything into a single system, LearnSphere enhances productivity, engagement, and accessibility.

# MARKET OPPORTUNITIES

Learning Management System (LMS) market in India, valued at USD 490 million in 2021, is projected to grow at a CAGR of 21.66%, reaching USD 2.931 billion by 2030, while the Enterprise Resource Planning (ERP) market is expected to generate USD 1.16 billion by 2029, growing at 9.06% CAGR.



Schools



Universities



# BUSINESS MODEL

LearnSphere will operate on a subscription-based model, where educational institutions pay a recurring fee to access the platform. Pricing can be based on the number of students and teachers, ensuring flexibility for institutions of all sizes.

# COMPETITIVE LANDSCAPE



Google Classroom



LearnSphere seamlessly combines both ERP and LMS functionalities, unlike competitors that focus solely on one. This unified approach provides a complete solution for both administrative and learning needs. Additionally, its user-centric design ensures an intuitive interface, making it easy to use for both educators and students,

# GO-TO-MARKET STRATEGY

LearnSphere will attract and retain customers through:

- **Targeted Ads** – Running digital campaigns on social media and educational platforms.
- **Partnerships** – Collaborating with schools, colleges, and ed-tech companies.
- **Institutional Outreach** – Direct engagement with administrators through webinars, demos, and pilot programs.



# TEAM



Riyansh



Deepak



Nikhil



# FUNDING ASK

We are seeking Rs. 15,000 to access premium AI tools for approximately four months, enabling us to accelerate the development of LearnSphere.



This investment will help us work more efficiently, speed up development, and build a strong, scalable platform for education.

# CLOSING SLIDE

“Shaping the Future of Education with LearnSphere”

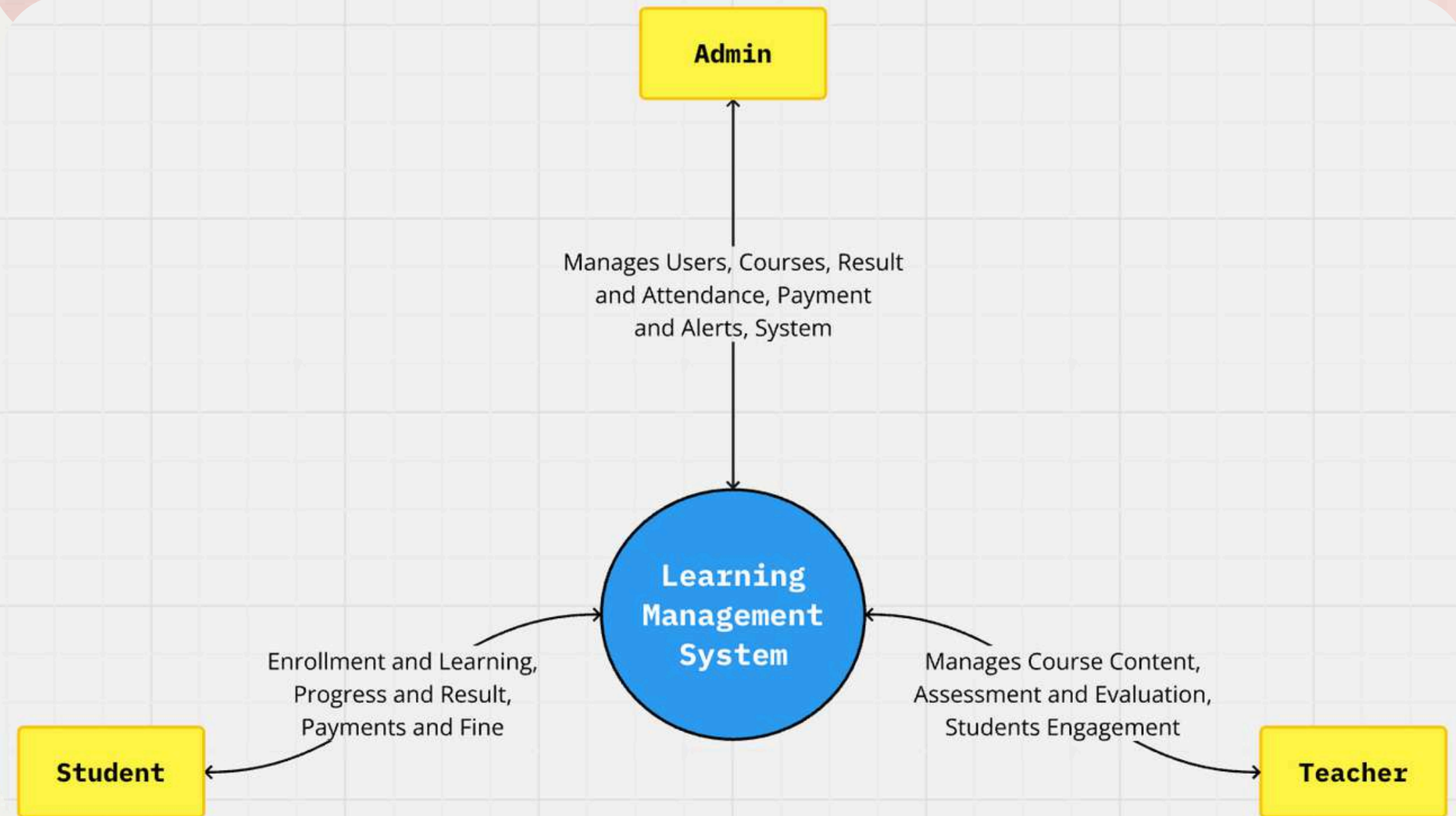
We envision a world where education is seamless, efficient, and accessible for all. By unifying ERP and LMS, we eliminate complexity, enhance productivity, and empower both educators and students.



# PROBLEM STATEMENT

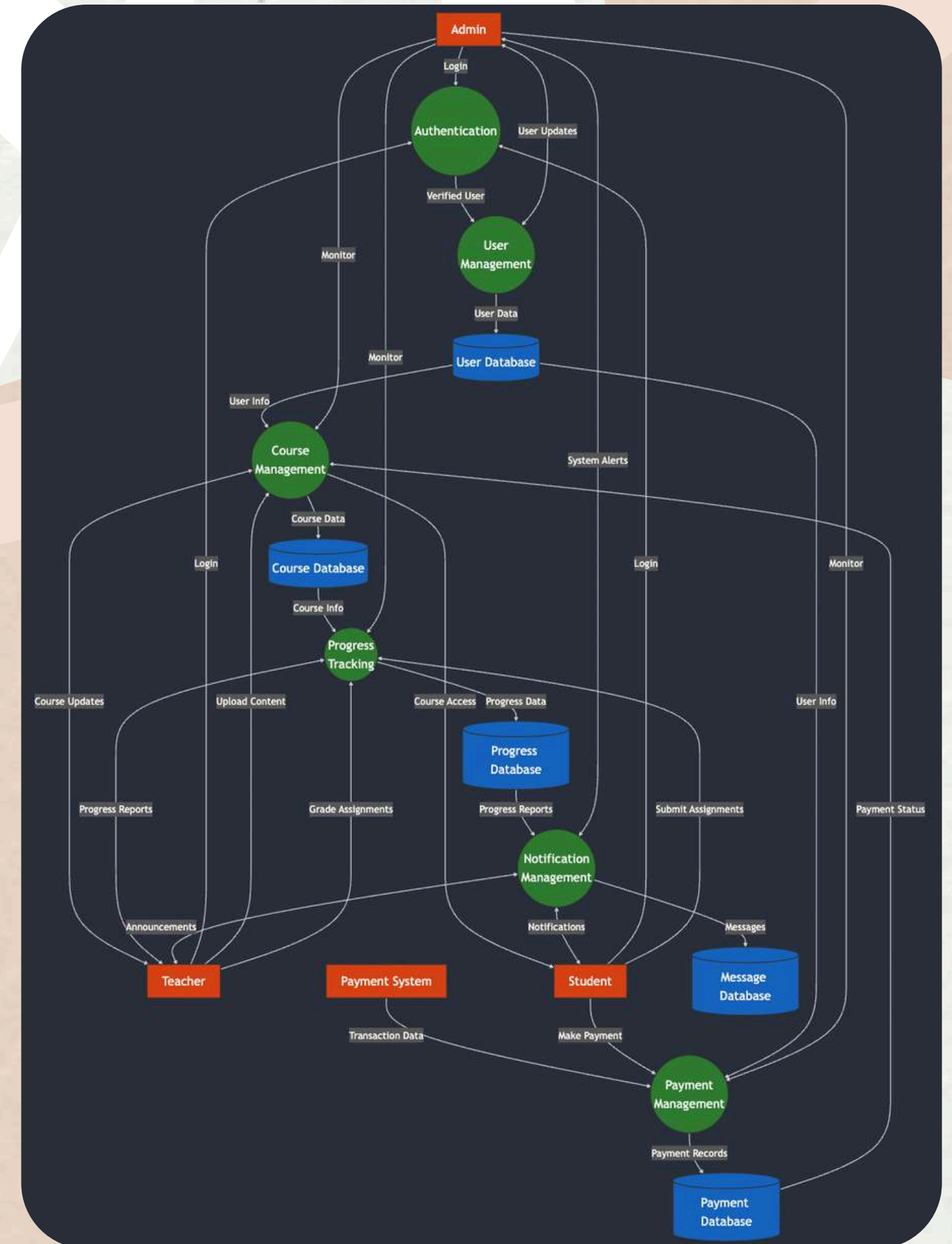
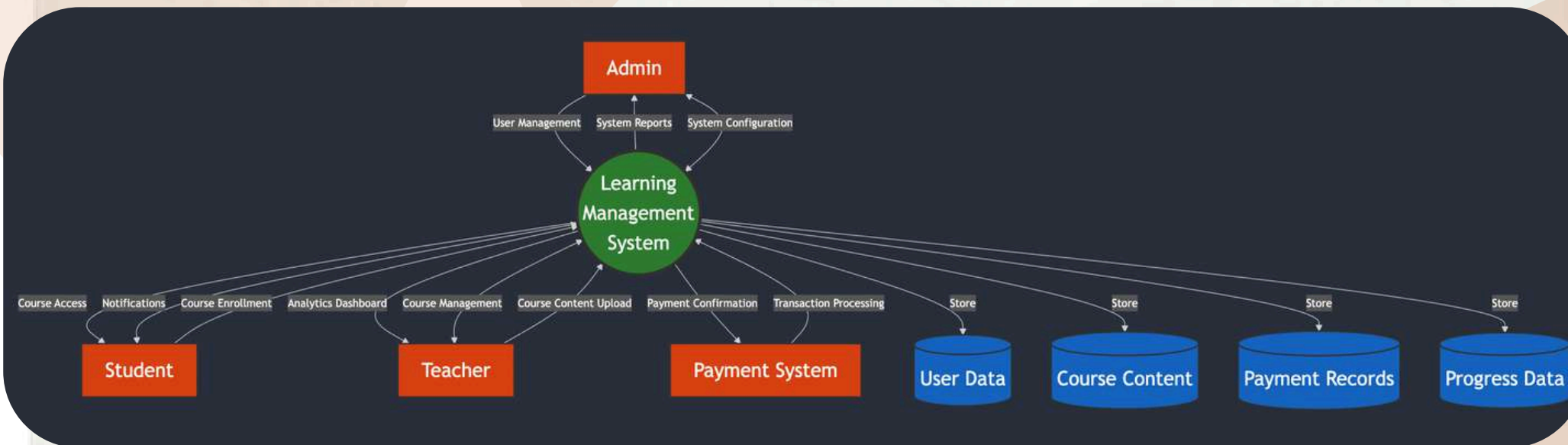
"LearnSphere" integrates the best of Enterprise Resource Planning (ERP) systems and Learning Management Systems (LMS) to efficiently address the diverse needs of educational institutions and Students.

# CONTEXT DIAGRAM



# DATA FLOW LEVEL-1

## DATA FLOW LEVEL-0





# FEASIBILITY STUDY

## Economic Feasibility:

- Costs-
  - Development (frontend/backend), hosting, and integrations (payment gateway, OTP, plagiarism checker)
- Benefits-
  - Long-term savings by automation of administrative tasks (attendance, fees, results)
  - Reduced dependency on third-party platforms(TCSiON, Canvas)

## Technical Feasibility:

- Requirements-
  - Modern tech stack (React.js/Node.js, MySQL) and API integrations (payments, OTP).
- Risks & Solutions-
  - **Data Breaches**; Use SSL encryption, secure authentication.
  - **Performance Issues**; Optimize servers with cloud solutions.

## Operational Feasibility:

- Efficiency-
  - Admin controls ensure smooth operations.
  - Addresses student and teacher needs with features like progress tracking and plagiarism checks
- Revenue Model-
  - Subscription Based Revenue Model

## Schedule Feasibility:

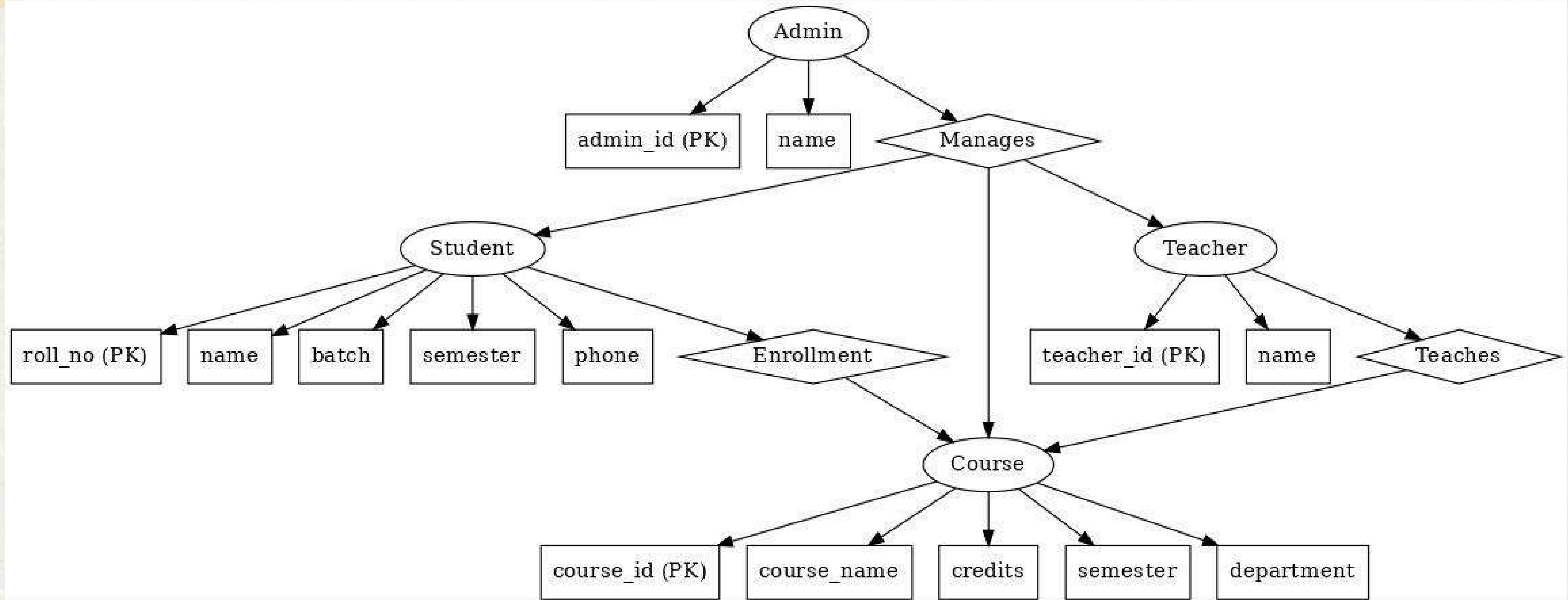
- Timeline- ~4 months
  - Requirements Gathering & Analysis: 2 weeks.
  - UI/UX Design: 3 weeks.
  - Development (Frontend & Backend): 8-10 weeks.
  - Testing (Unit, Integration, and User): 3 weeks.
  - Deployment and Feedback: 2 weeks.
- Optimizations-
  - Agile methodology and parallel development



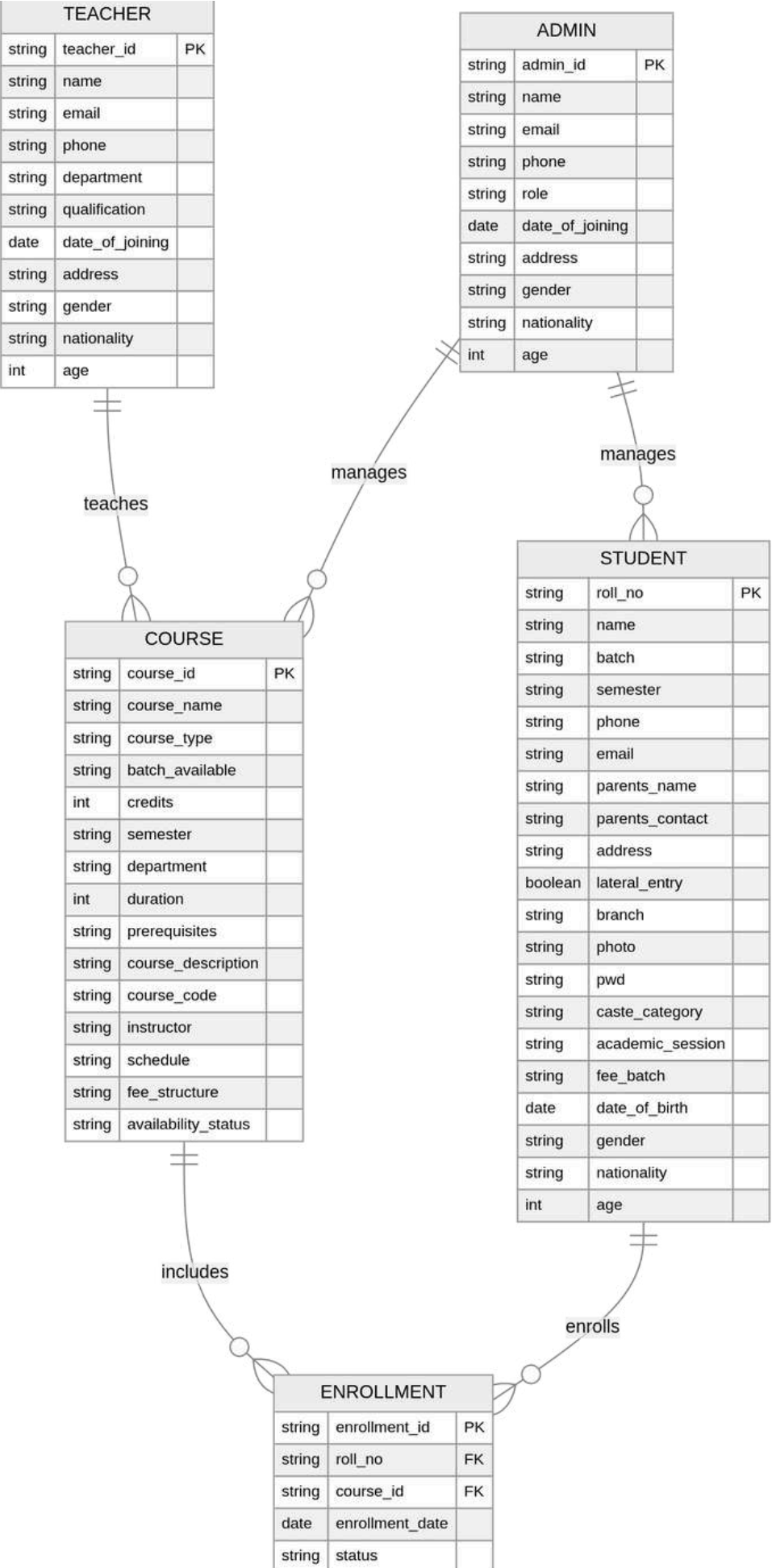
# REQUIREMENTS

Functional Requirement	
Course Management	Teachers can create, update, delete, and categorize courses. Students can browse or search courses by keywords or category.
Content Management	Teachers upload videos, documents, and study materials with access control. Students access content sequentially.
Assignments and Quizzes	Teachers create assignments/quizzes, and students submit them for grading and feedback.
Progress Tracking	Students track course progress, and teachers monitor student performance.
Admin Controls	Admins manage users, courses, and system activities, enabling/disabling as required
Payment Integration	Secure payments for paid courses with automated receipts.
Attendance Management	Teachers record attendance; students can view their attendance status.
Notifications and Alerts	Automatic alerts for deadlines, updates, and announcements

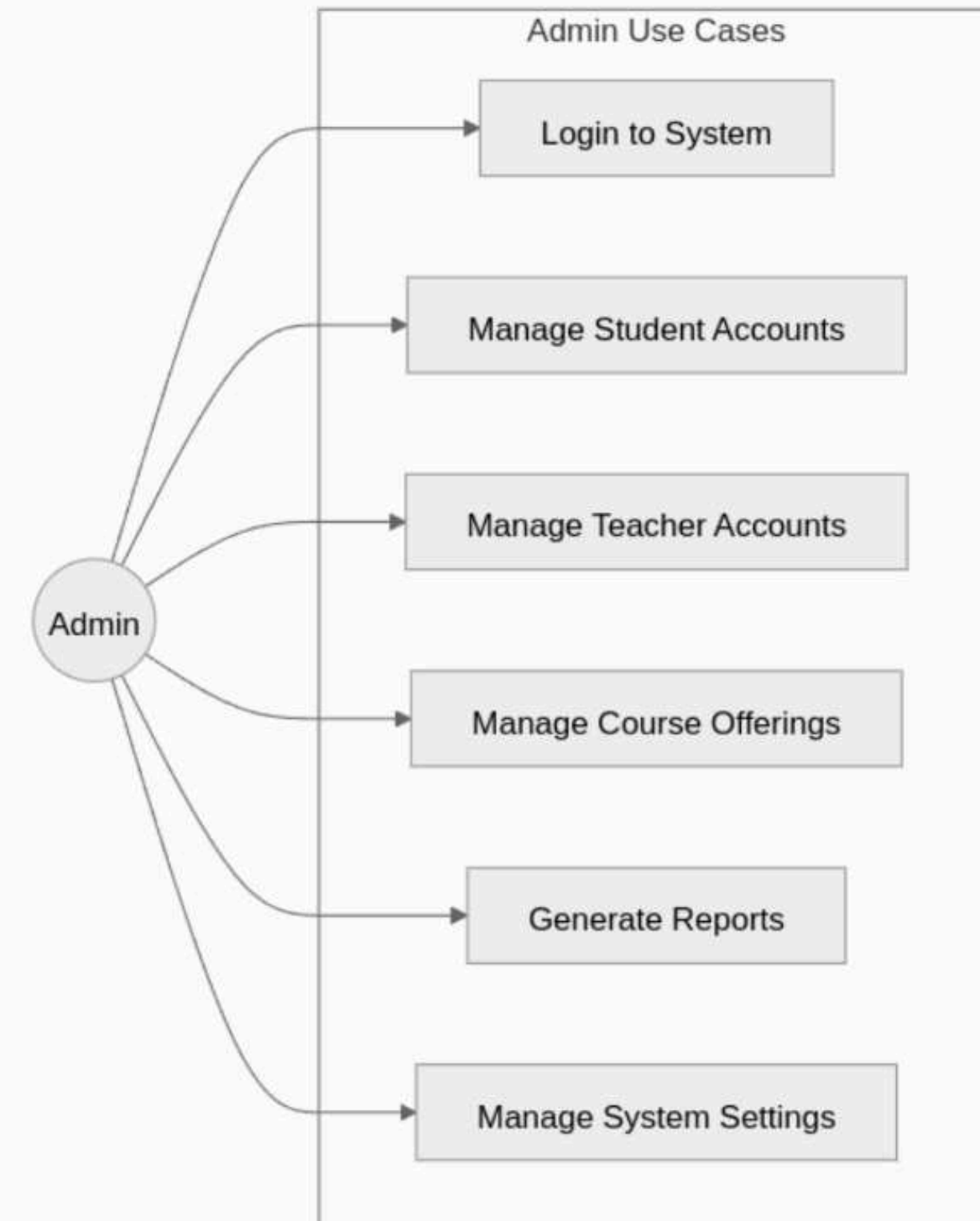
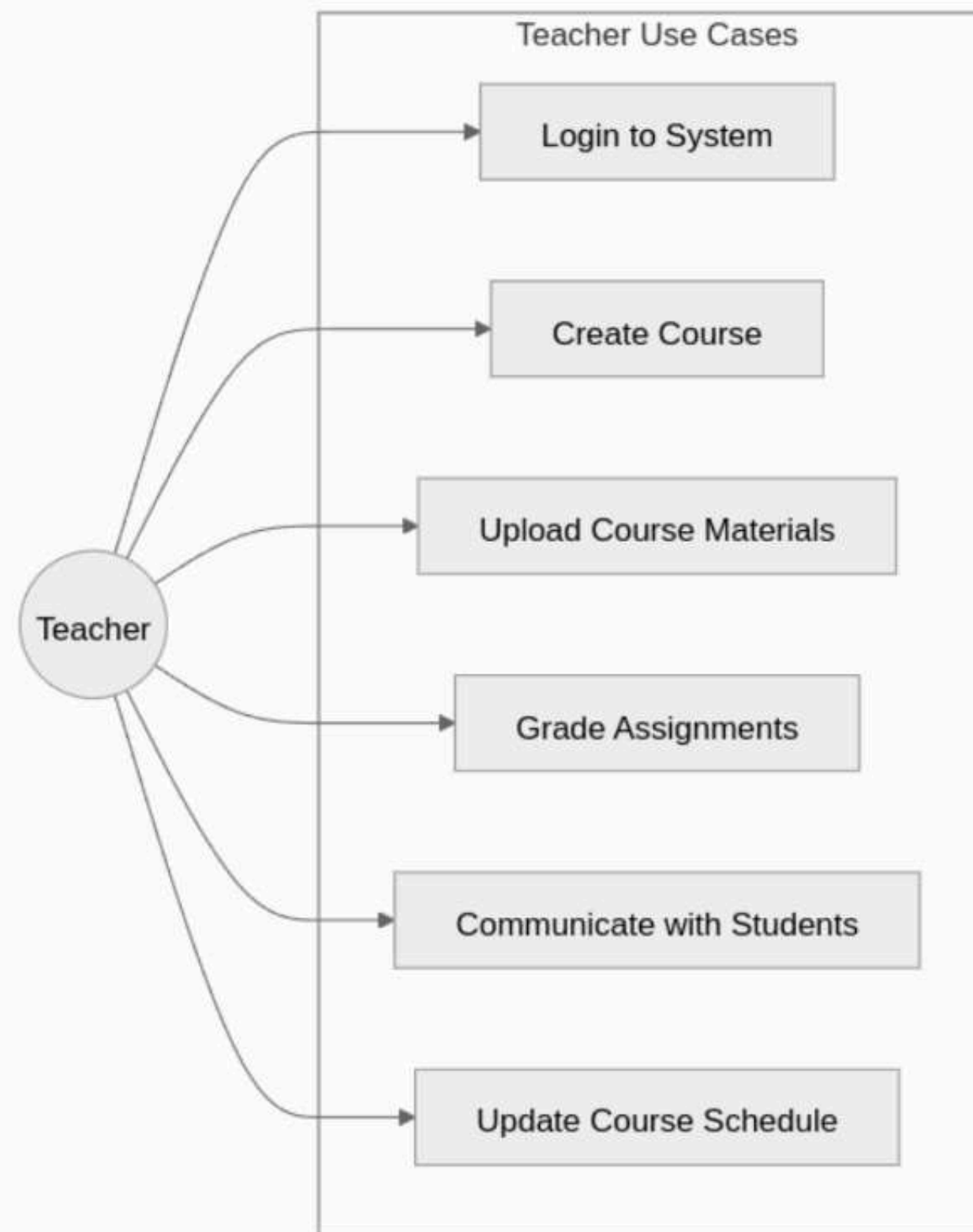
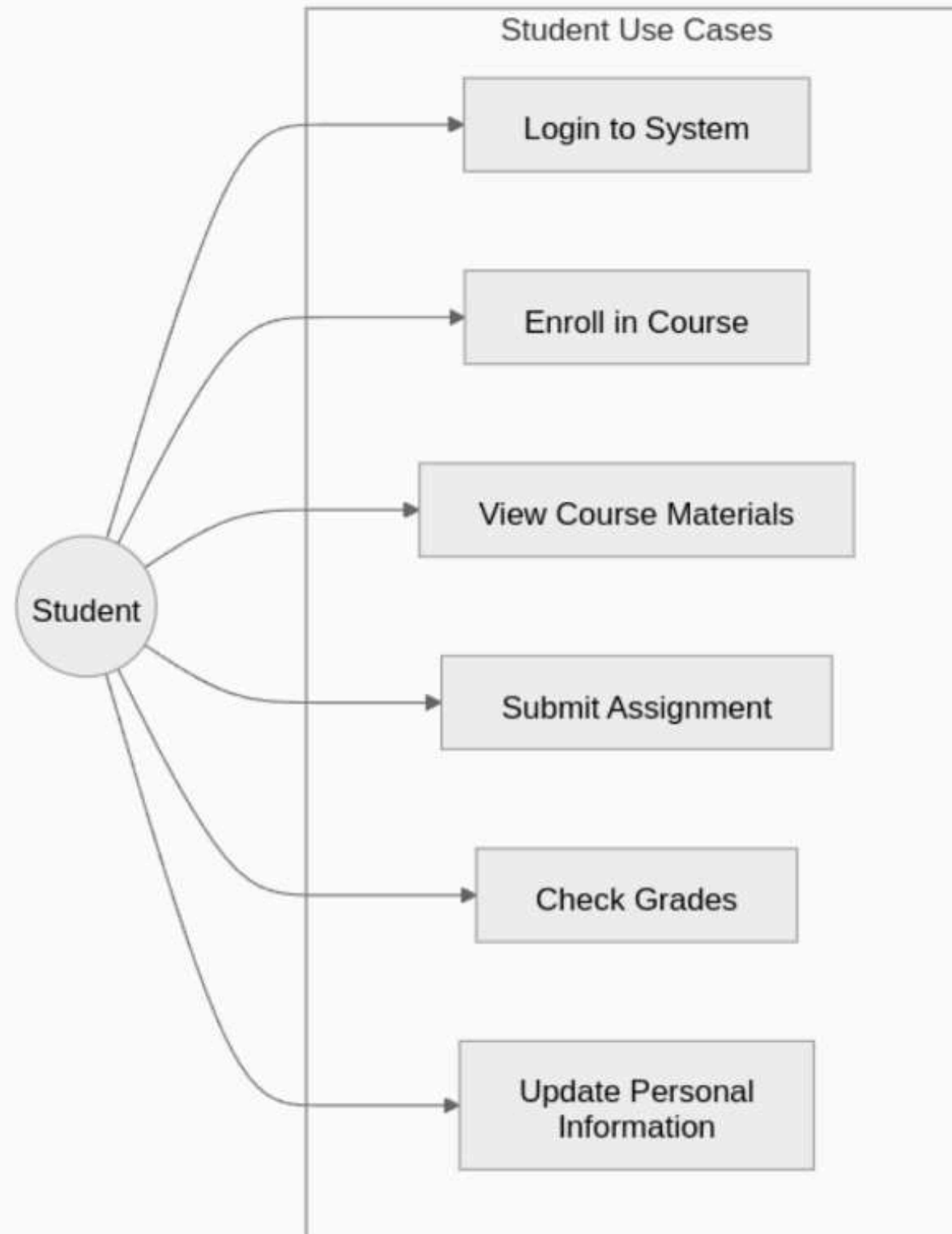
# ER DIAGRAM







# USE-CASE DIAGRAM





Feature	Student	Faculty	Admin
1. User Authentication & Security			
Login Required	✓	✓	✓
Multi-Factor Authentication (MFA)	Optional	✓ Required	✓ Required
Role-Based Access Control (RBAC)	✓	✓	✓
2. Course Management			
View Course Materials	✓	✓	✓
Download Course Materials	✓	✓	✓
Upload Course Content	✗	✓	✓
Modify Course Content	✗	✓	✓
Assign/Unassign Students	✗	✗	✓
3. Assignments & Evaluation			
Submit Assignments	✓	✗	✗
Grade Assignments	✗	✓	✗
View Assignment Scores	✓ (Self)	✓ (All Students)	✗
Provide Feedback on Assignments	✗	✓	✗
4. Attendance & Timetable			
View Attendance Records	✓ (Self)	✓	✓
Mark Attendance	✗	✓	✓
Generate Attendance Reports	✗	✓	✓
View Class Timetable	✓	✓	✓
Modify Timetable	✗	✗	✓

Feature	Student	Faculty	Admin
5. Fees & Payments			
View Fee Details	✓	✗	✓
Make Payments	✓	✗	✗
Generate Payment Receipts	✓	✗	✓
Manage Fee Structure & Discounts	✗	✗	✓
6. Analytics & Reports			
Access Course Analytics	✗	✓	✓
Generate Performance Reports	✓ (Self)	✓ (Students)	✓ (All)
View System Usage Statistics	✗	✗	✓
7. Notifications & Customization			
Receive Notifications	✓	✓	✓
Customize Notification Preferences	✓	✓	✓
Enable/Disable Email & SMS Alerts	✓	✓	✓
8. External Integrations & APIs			
Integrate with Google Drive	✓	✓	✓
Connect with Video Conferencing	✓	✓	✓
API Access for Custom Integrations	✗	✗	✓
9. Security & Account Management			
Change Password	✓	✓	✓
Enable Two-Factor Authentication (2FA)	Optional	✓ Required	✓ Required
Manage User Roles & Permissions	✗	✗	✓
Deactivate or Suspend User Accounts	✗	✗	✓

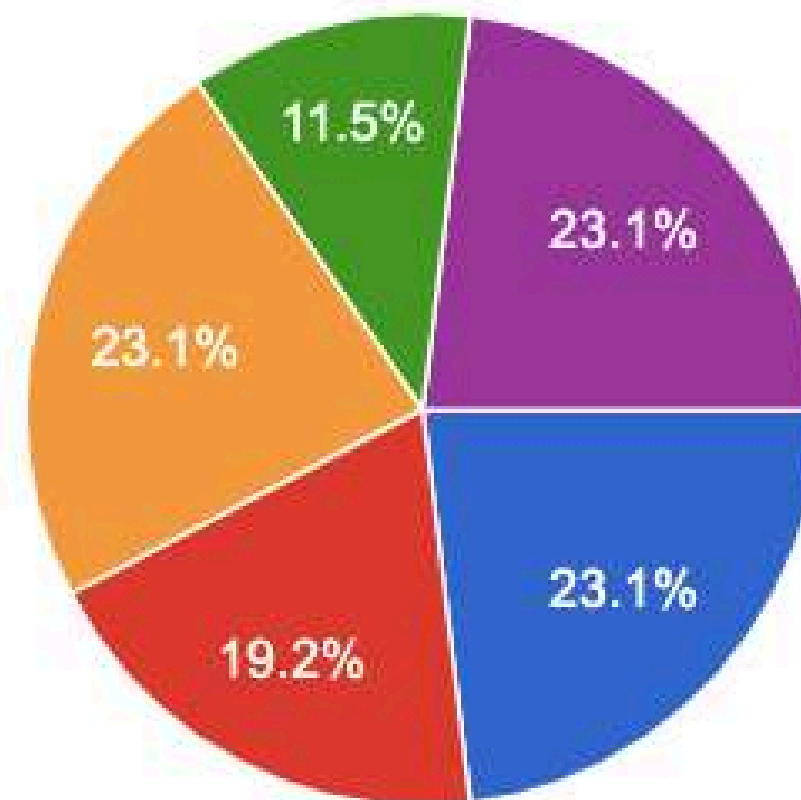
**STAKE HOLDER INTERACTIONS**



## How frequently do you use TCS iON?

26 responses

 [Copy chart](#)

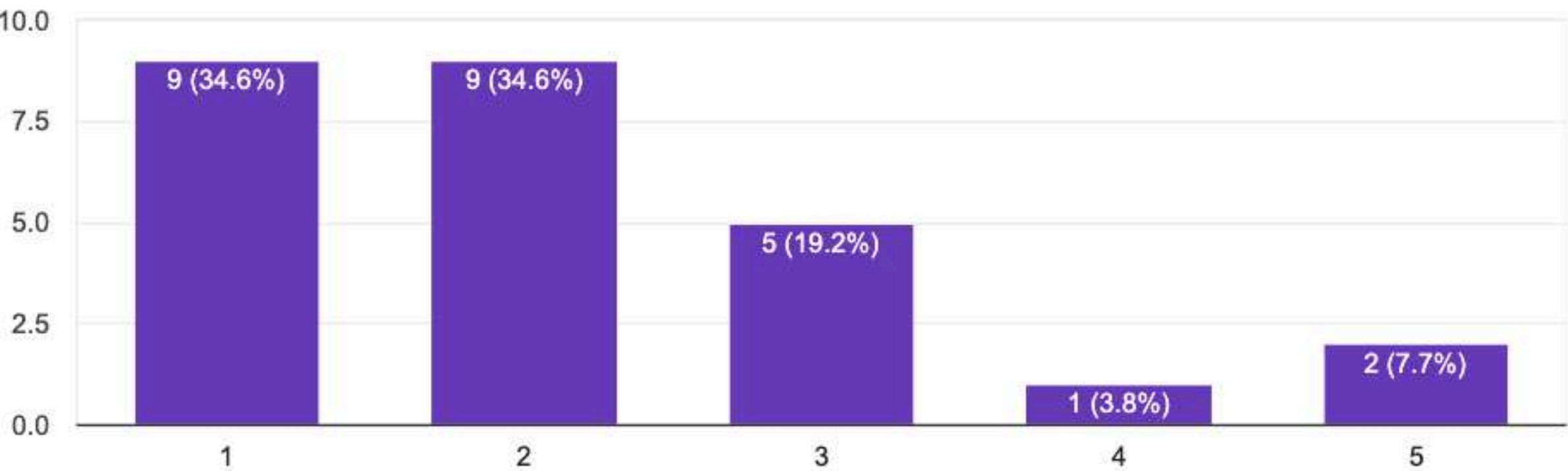
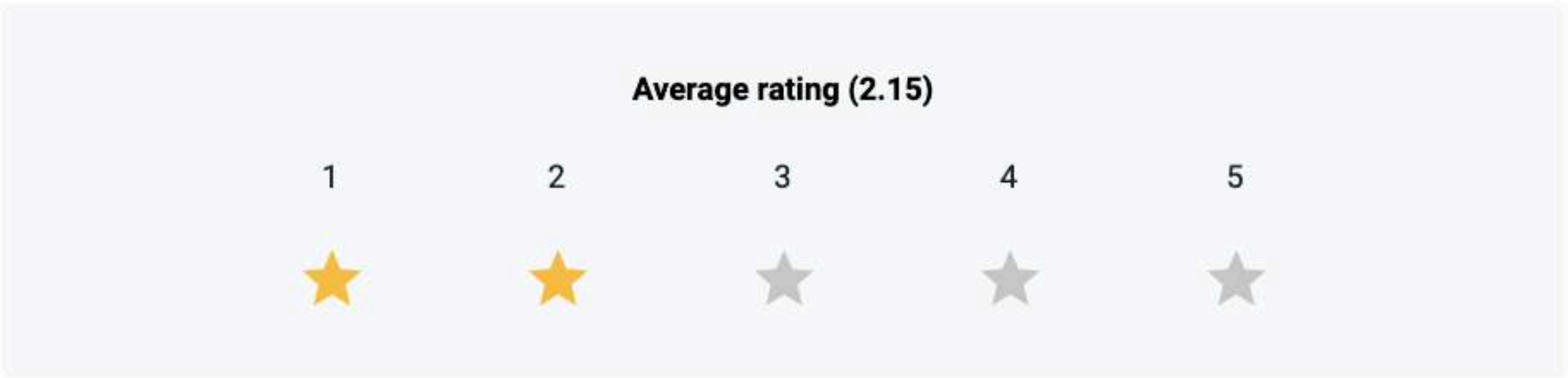


- Daily
- Few Times a Week
- Occasionally
- Rarely
- Never (only for Results)

How satisfied are you with TCS iON?

 Copy chart

26 responses

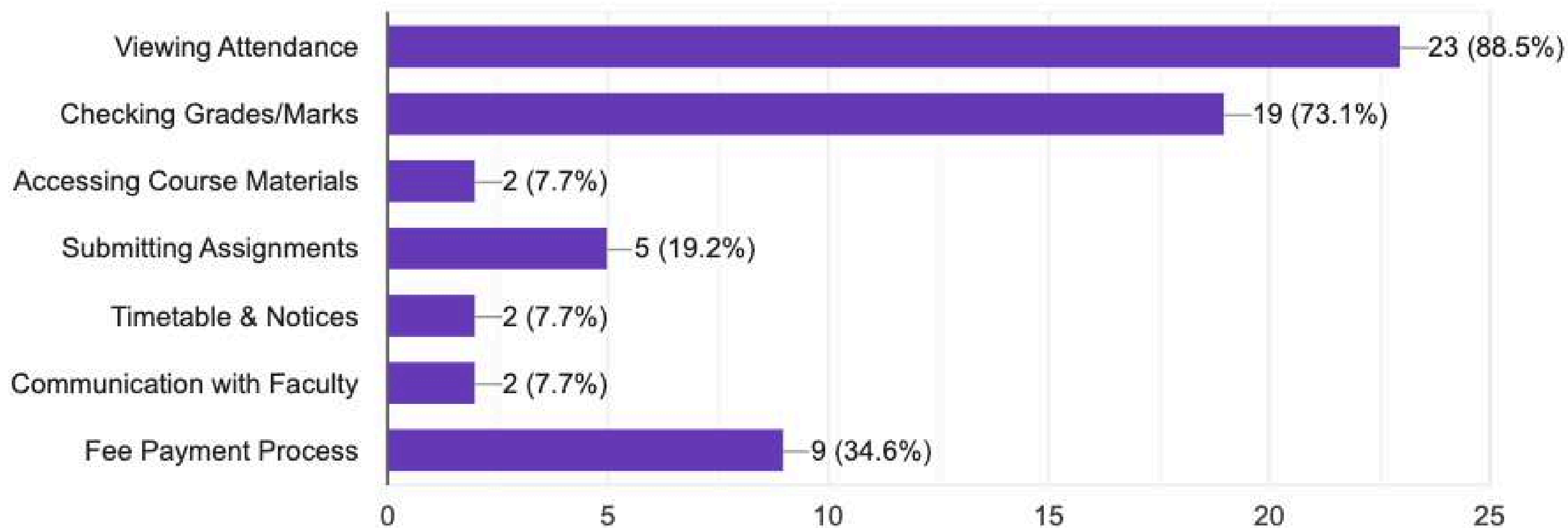




## What do you find most useful about TCS iON?

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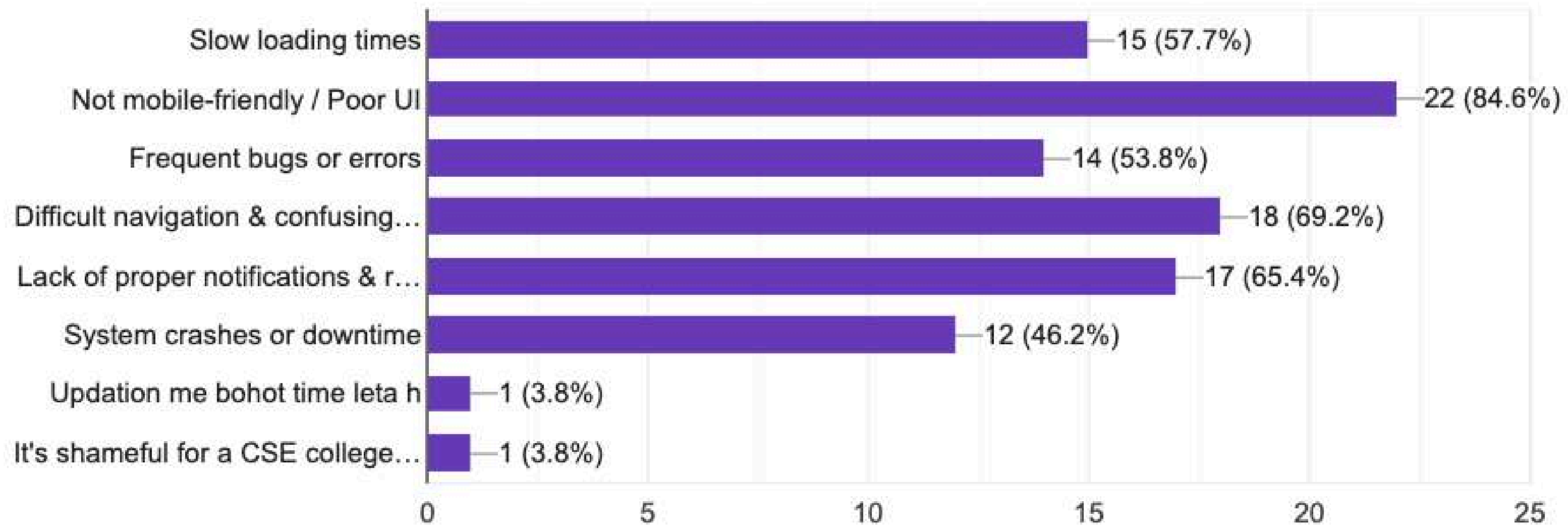
26 responses



## What issues do you face while using TCS iON?

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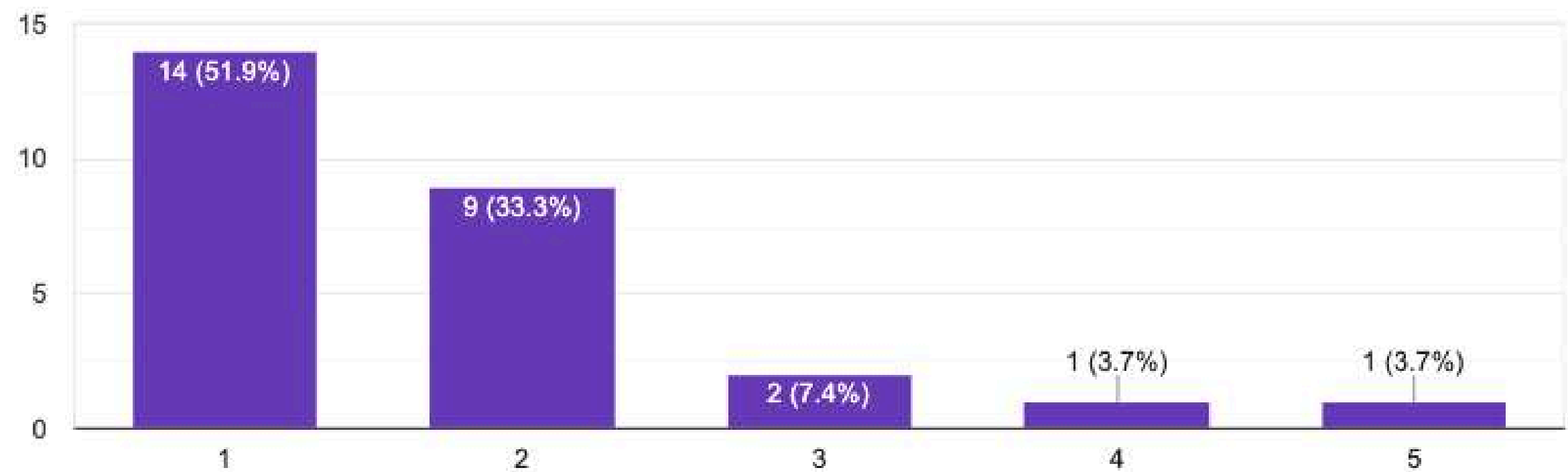
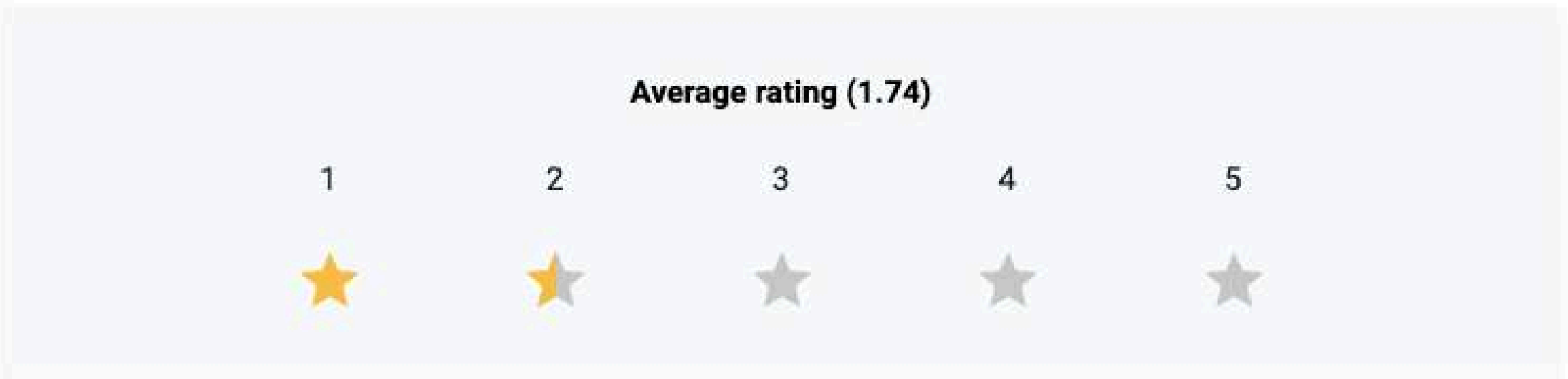
26 responses



How would you rate the user interface of TCS iON?

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27 responses

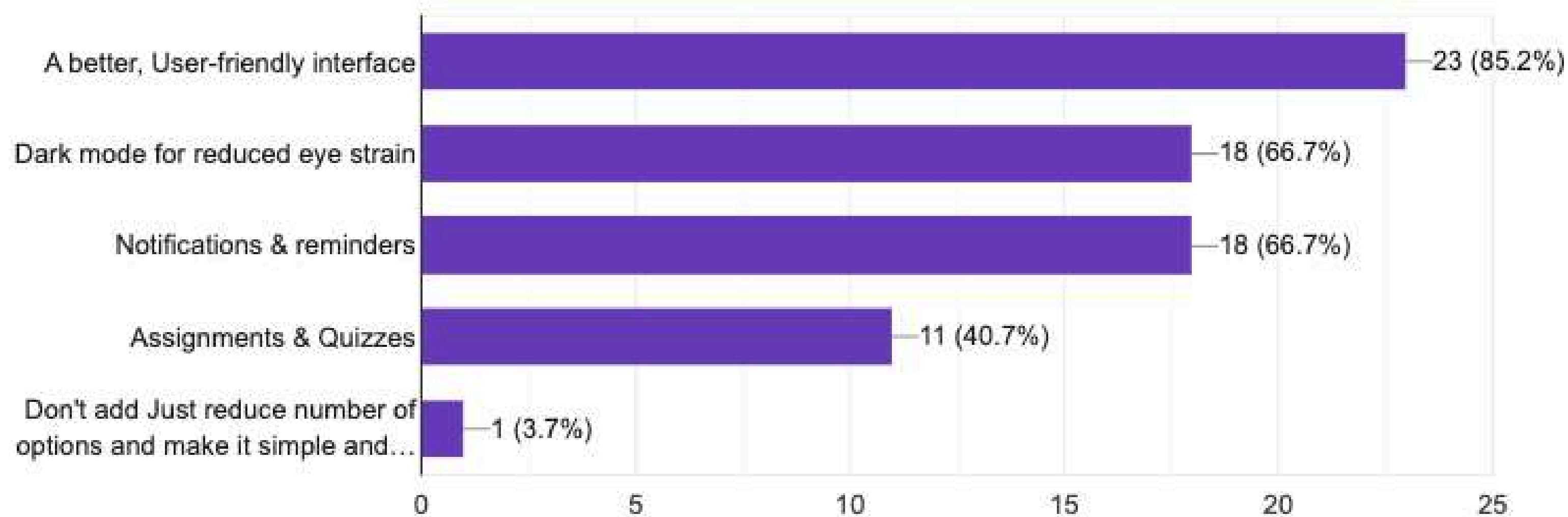




## What features do you think should be added to LearnSphere?

 [Copy chart](#)

27 responses



## Any Other Suggestion

5 responses

Bhai Hardest app banana 🔥🔥🔥🔥🔥🔥

bas

There is need for organized frequently used cards like payment, results and attendance.

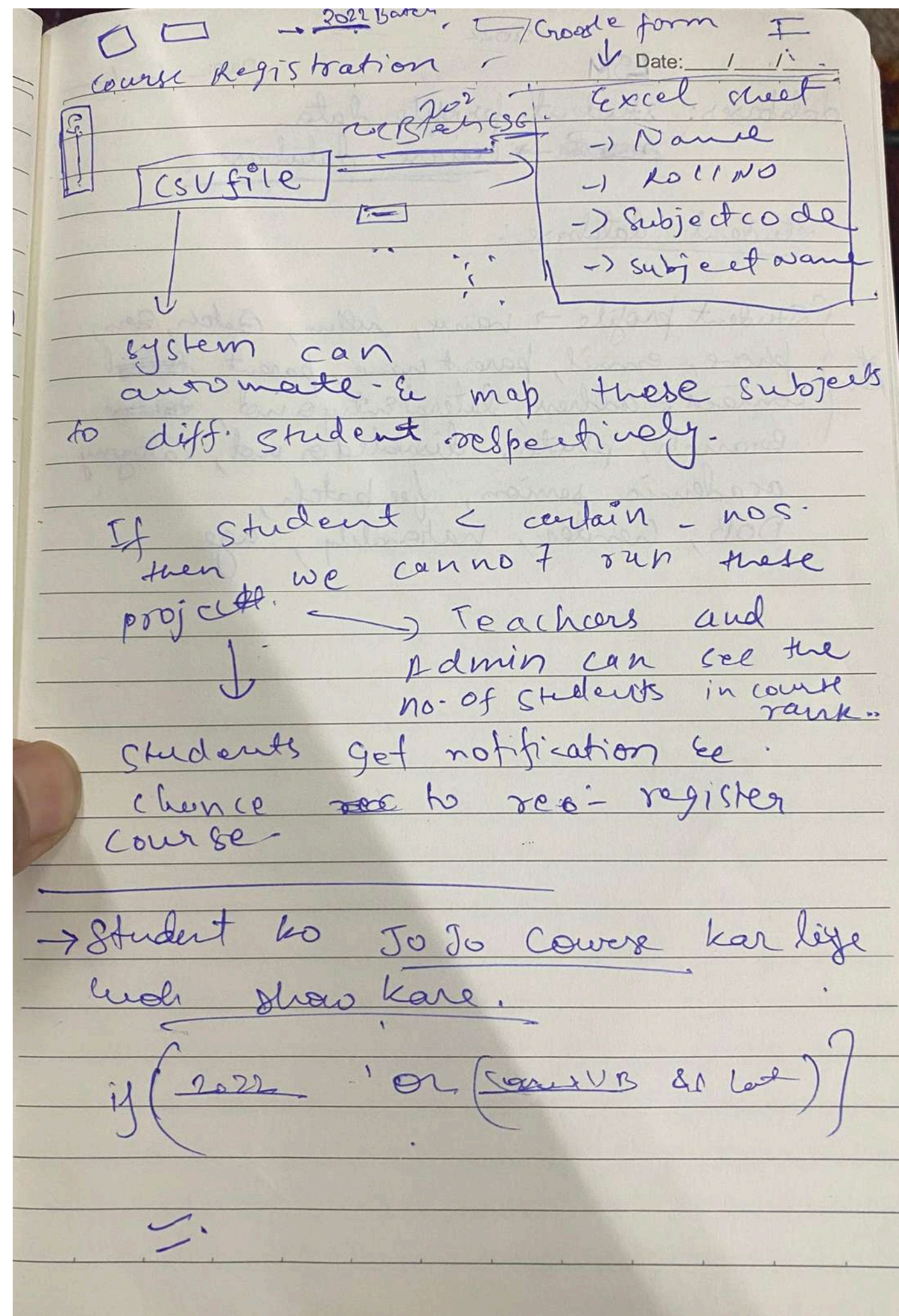
Keep it simple , there are many button does same one thing but after eternity later the page loads also it's very confusing to select one in many options some work some don't.

No



**TALK WITH ERP  
ADMIN**





- Automatic CSV Generation for Students in a particular course
- Course Float or not can be decided automatically and students receive corresponding notification
- Automated Registration



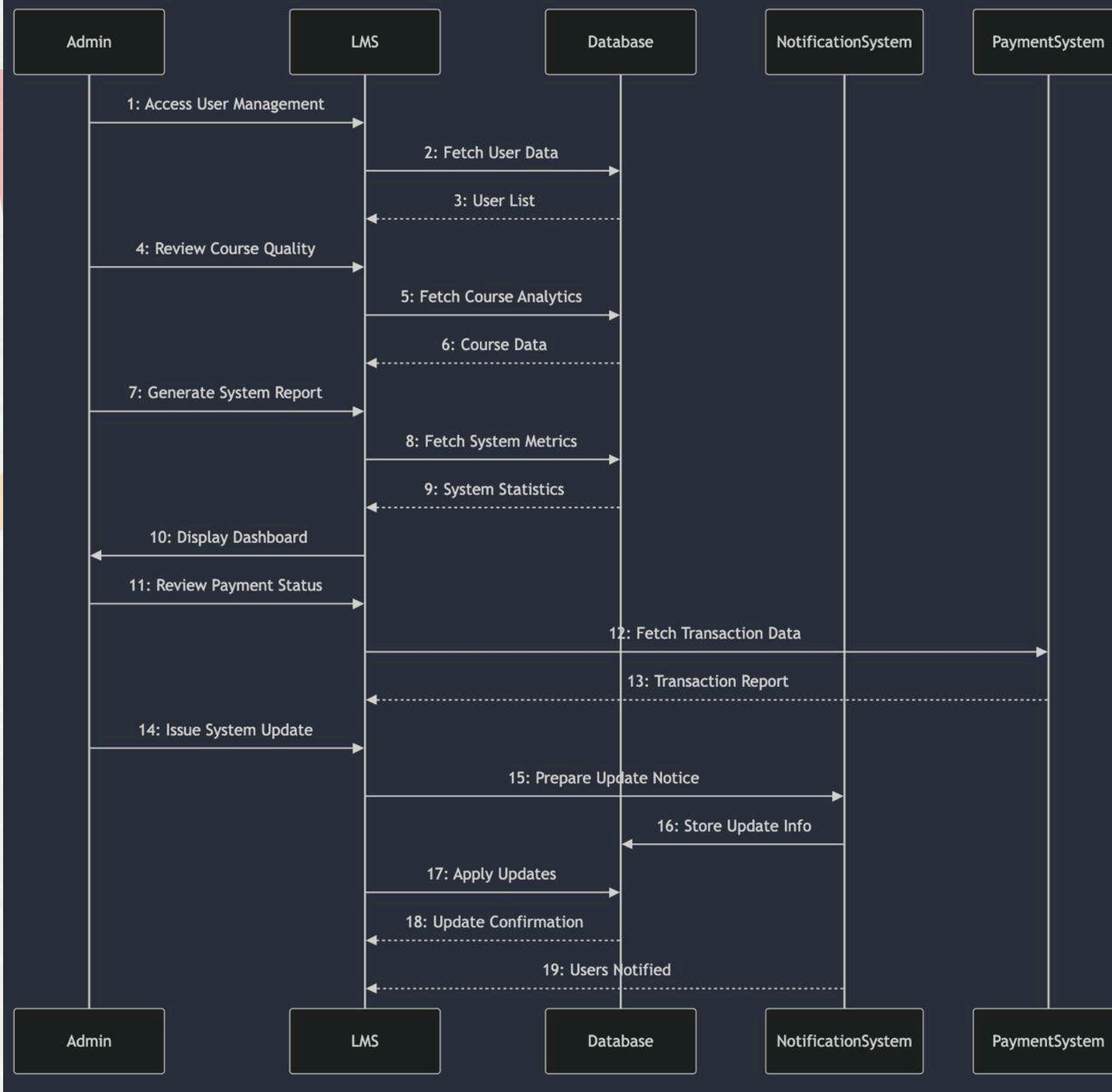
# **UMESH TRIPATHI SIR**

- NEED FOR AUTOMATING REGISTRATION OF COURSES - BACKLOG, ADDITIONAL ETC.**
- STREAMLINING SEMESTER EXCHANGE PROCESS**

# **ACCOUNTS OFFICER**

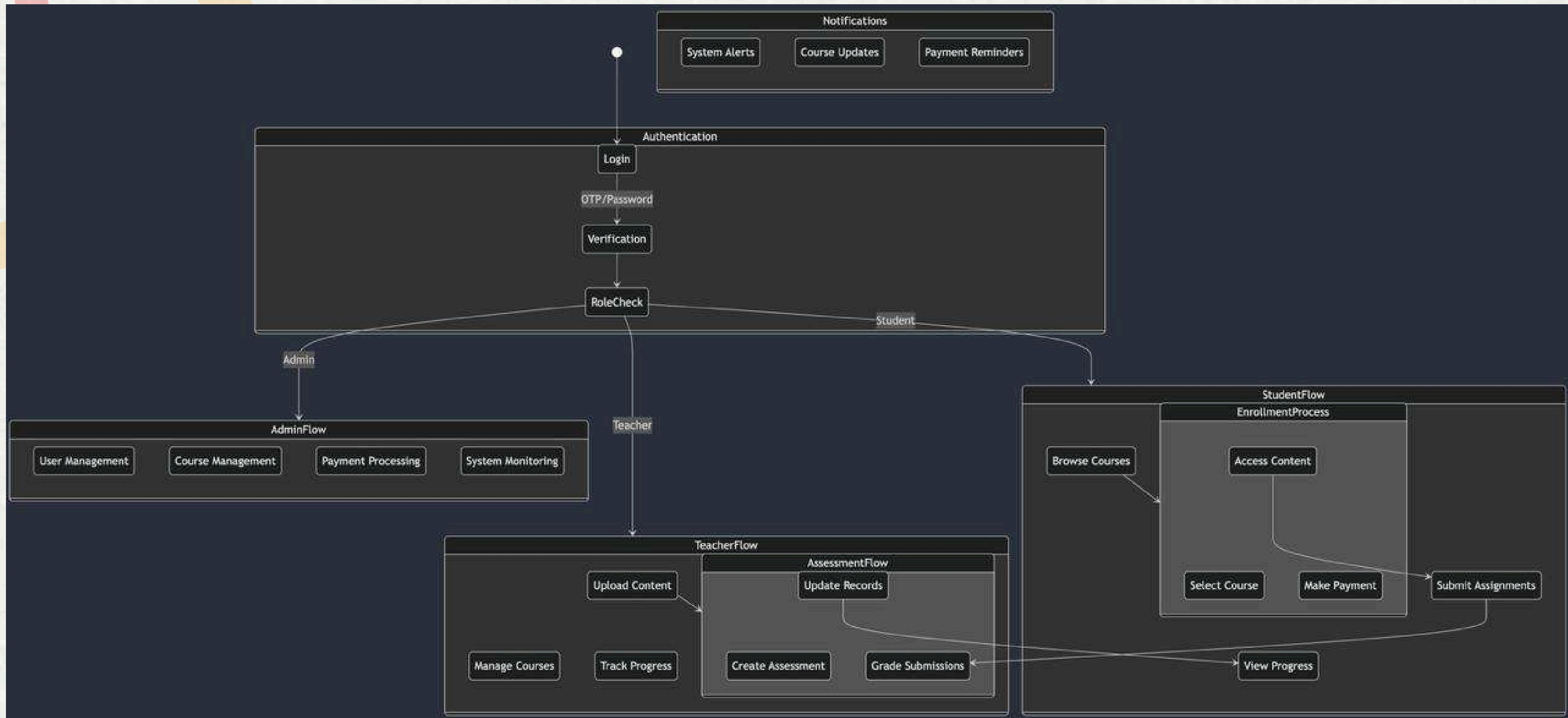
- **USE A SIMPLE AND EASY TO USE FEE PAYMENT PROCESS**
- **HOSTEL AND OTHER FINES VISIBLE ON ERP ITSELF**



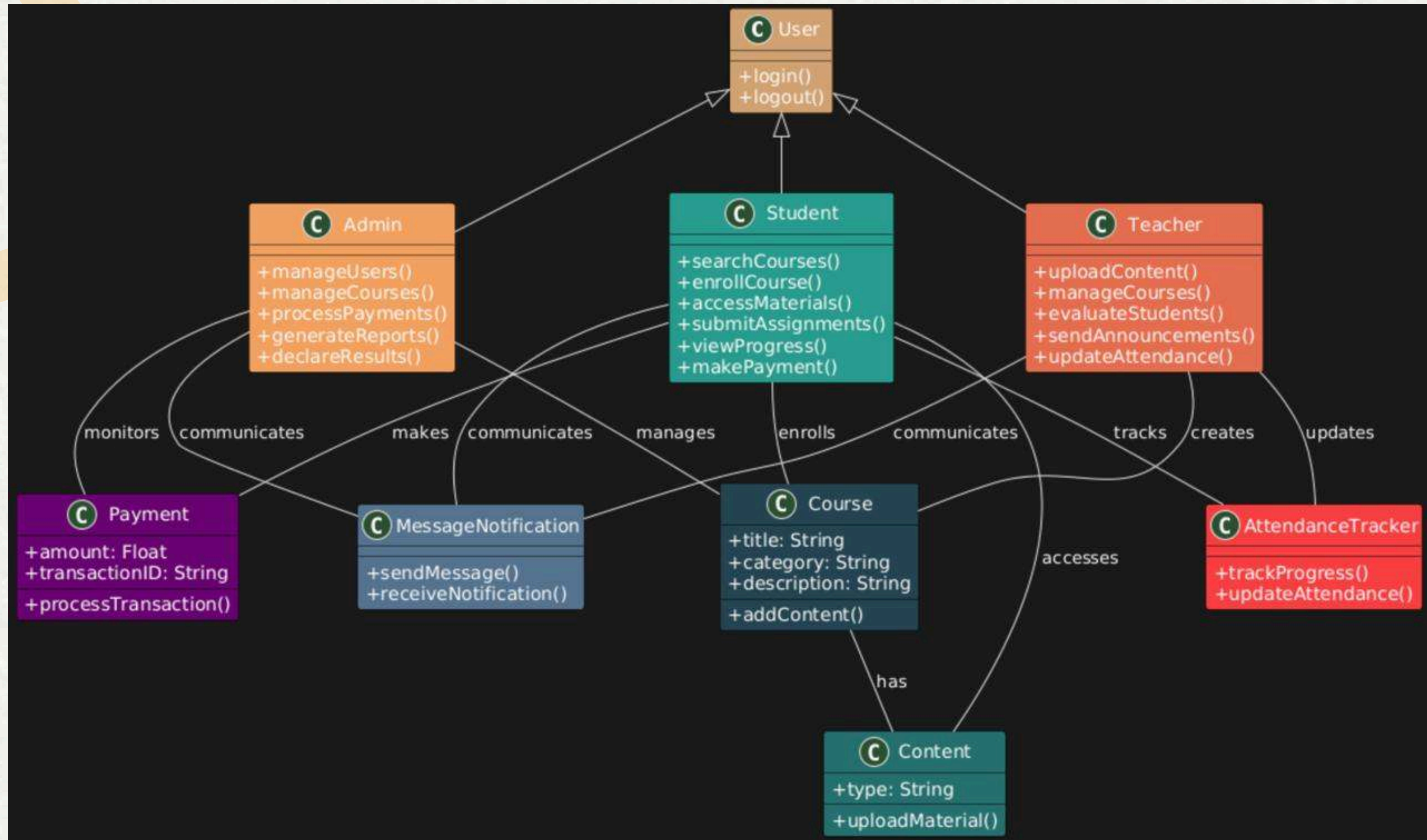


# SEQUENCE DIAGRAM

# ACTIVITY DIAGRAM

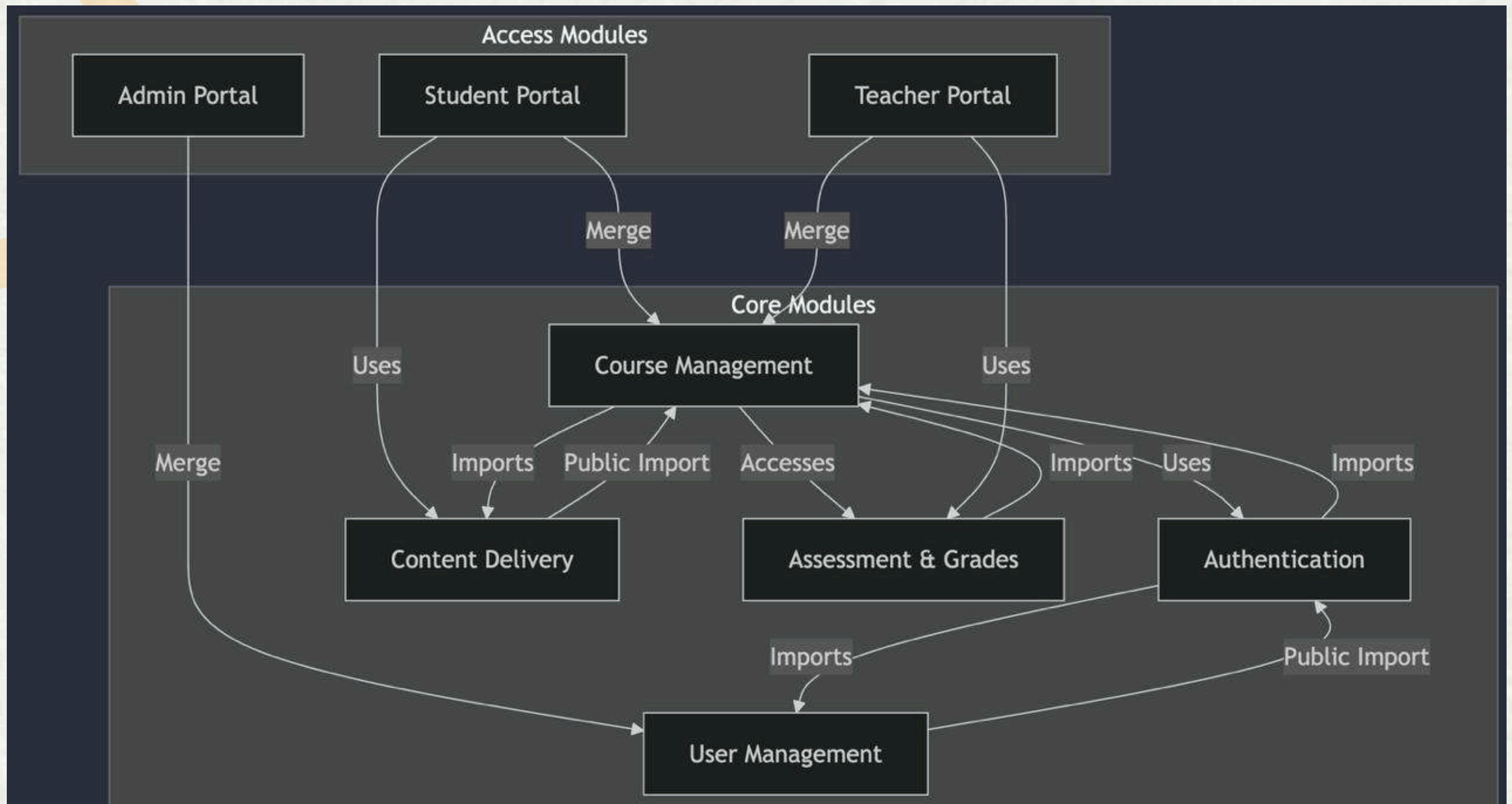



# CLASS DIAGRAM





# PACKAGE DIAGRAM



The background features a repeating pattern of stylized, hand-drawn floral motifs in a light beige color. Each motif consists of a central stem with several rounded, teardrop-shaped leaves or petals radiating from it. The overall style is simple and modern.

**THANK YOU!!**

# REQUIREMENTS

Parameter	Functional Requirement	Non-Functional Requirement
Requirement	It is mandatory (e.g., login, enrollment, assignment submission).	It is non-mandatory but enhances system performance (e.g., response time, security).
Capturing Type	Captured in use cases based on user actions.	Captured as quality attributes like usability, scalability, and reliability.
End-Result	Product features: course enrollment, assignment submissions, notifications, progress tracking.	Product properties: high availability (99.9% uptime), secure data handling, fast response time.
Capturing	Easy to capture as they directly align with user and stakeholder expectations.	Hard to capture since they depend on performance and system environment.
Objective	Verifies system functionality (e.g., uploading content, accessing courses, managing users).	Ensures software performance (e.g., quick load times, handling simultaneous logins).
Area of Focus	Focuses on user requirements such as intuitive navigation and robust content management.	Focuses on user expectations and overall experience, ensuring mobile compatibility and cloud hosting.
Documentation	Describes what the LMS does, such as course exploration, role-based dashboards, and alerts for deadlines.	Describes how the system works, such as secure communication protocols and efficient server management.
Product Info	Represents features like login/registration, messaging, plagiarism checker, attendance, and marks updates.	Represents properties like response time, intuitive UI, and seamless system scalability.





# AVOIDING COMMON PITFALLS

## **Procrastination:**

- Break tasks into smaller, manageable chunks.
- Use time-blocking techniques to commit to study times

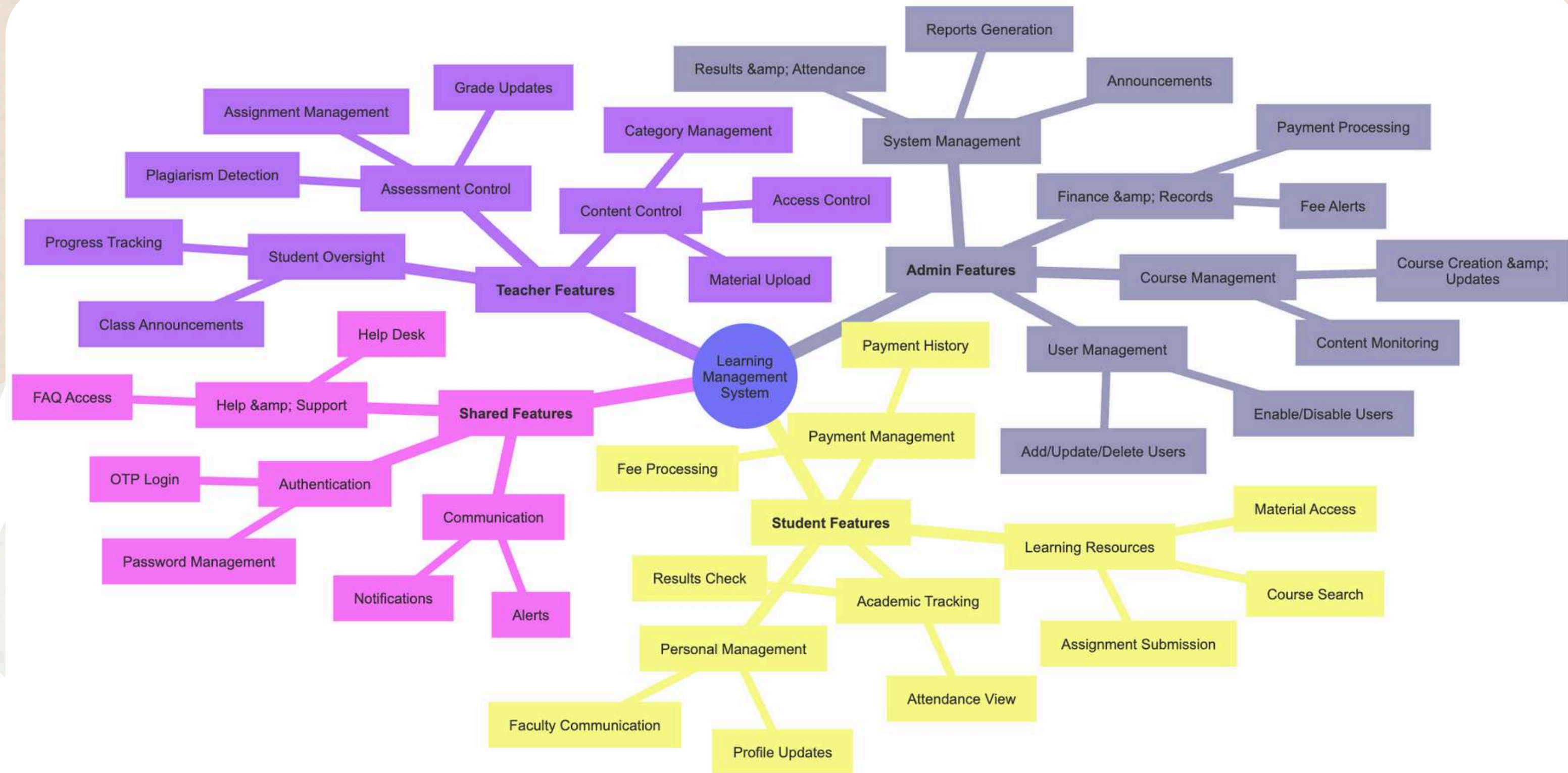
## **Cramming:**

- Avoid last-minute studying by planning ahead.
- Prioritize understanding over memorization.

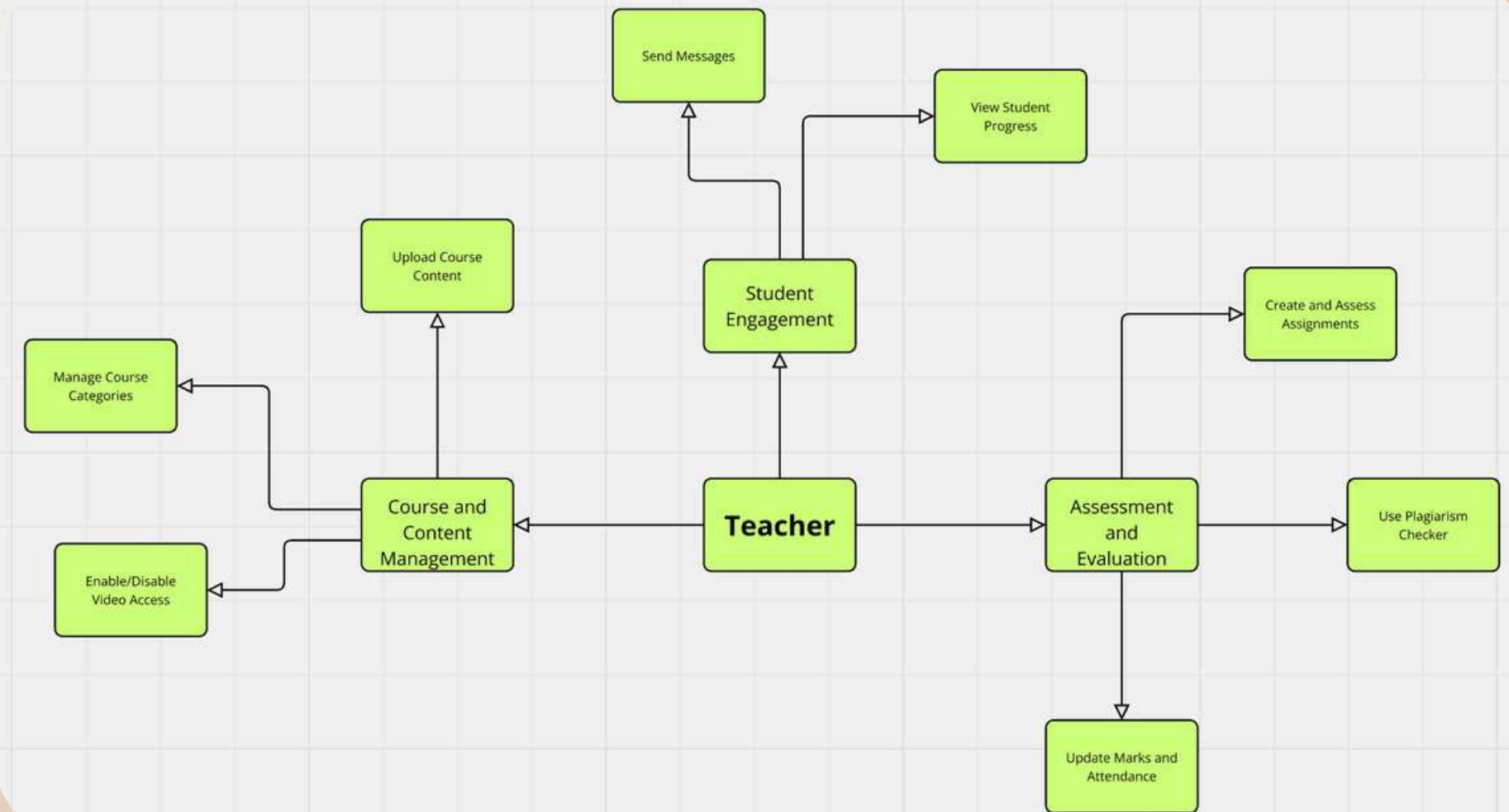
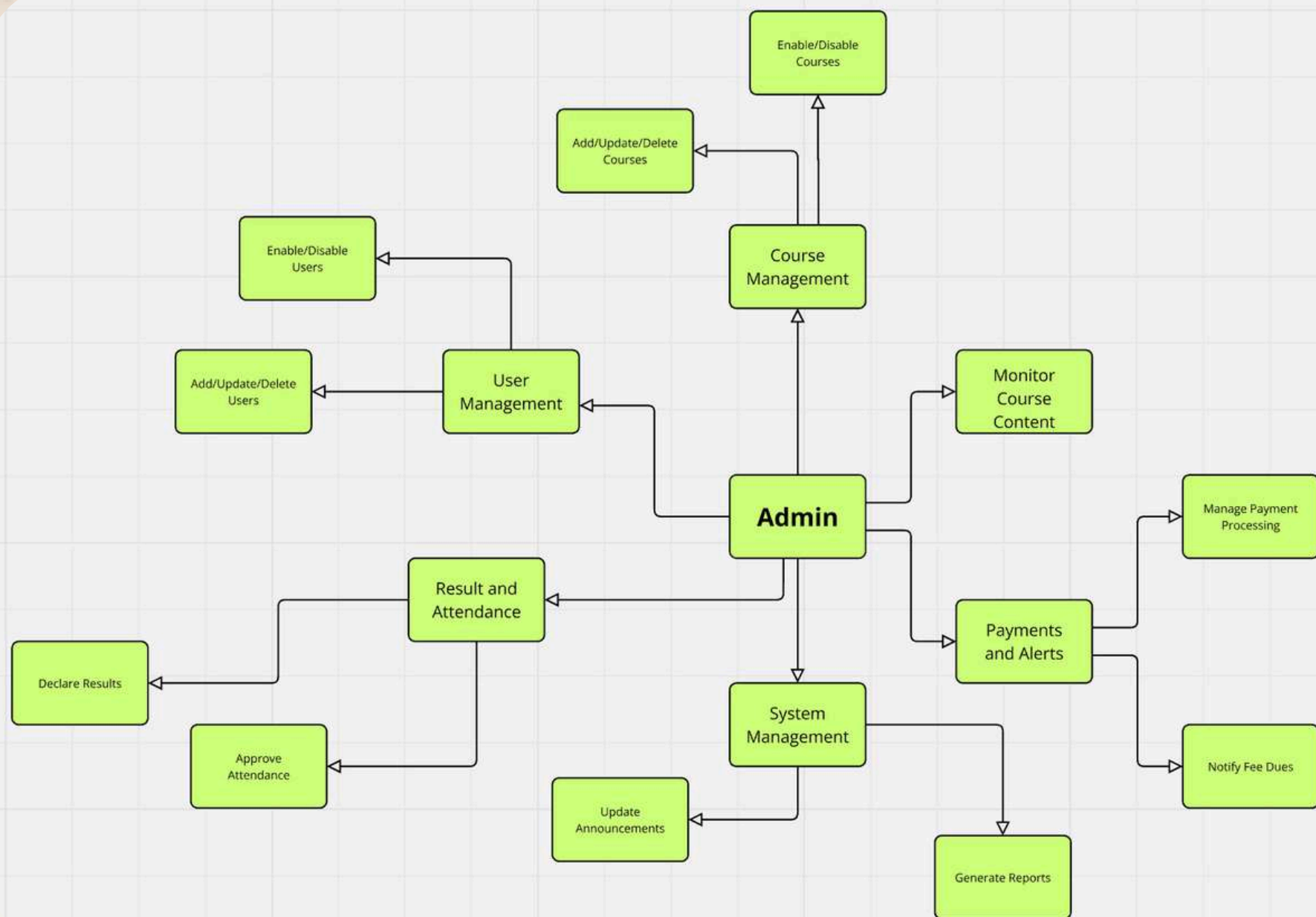
## **Multitasking:**

- Focus on one subject at a time to improve concentration and retention.

# MINDMAP



# FLOWCHARTS





# FLOWCHARTS

