

## 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 unifies ERP and LMS, eliminating multiple systems. Students access materials, track progress, and get feedback in one place. Teachers streamline content, assessments, and student tracking efficiently. This integration boosts productivity, engagement, and accessibility."

## Objectives

- **Seamless Academic Management:** Integrate student, faculty, and course administration into a single platform.
- **Efficient Data Handling:** Reduce dependency on multiple tools for student records, fee management, and faculty payroll.
- **Real-Time Collaboration:** Enable secure access for admins, faculty, and students to interact and manage academic workflows.
- **User-Friendly Interface:** Provide an intuitive and hassle-free experience for institutional management.
- **Scalability:** Support institutions of all sizes, from small colleges to large universities.

## Technology Stack

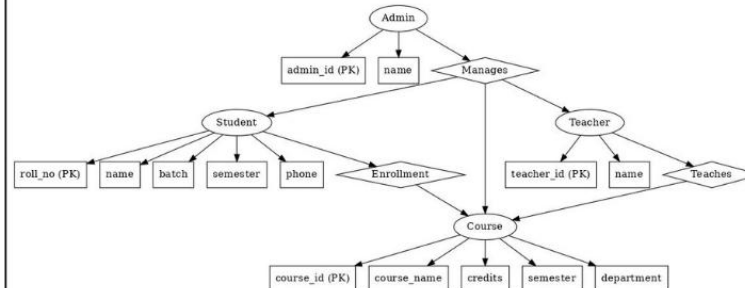
### FrontEnd:

- React.JS – Dynamic and interactive UI development
- Tailwind CSS – Utility first styling for responsive design
- Axios – Simplified HTTP requests for API communication

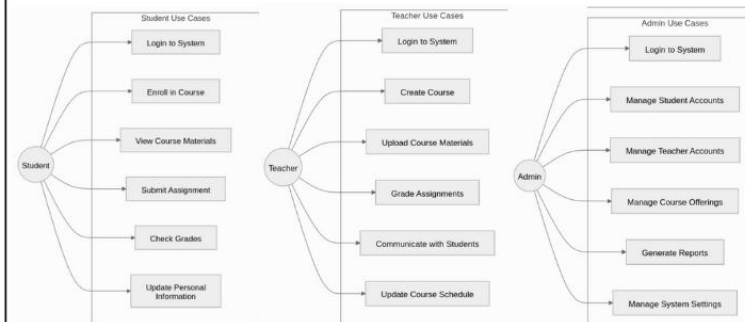
### BackEnd:

- Node.JS – Scalable and efficient server-side runtime
- Express.JS – Lightweight and flexible web framework
- PostgreSQL – Reliable and powerful relational database
- Passport.JS – Secure authentication and session management
- Cloudinary – Cloud-based media storage and optimization

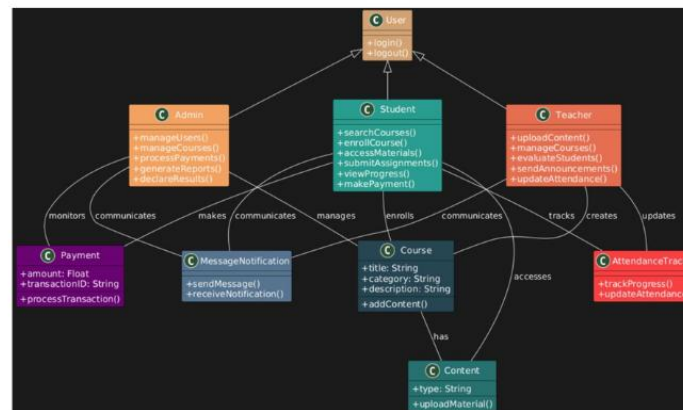
## Analysis and Planning



Represents the database structure of LearnSphere, showing relationships between admins, students, faculties.

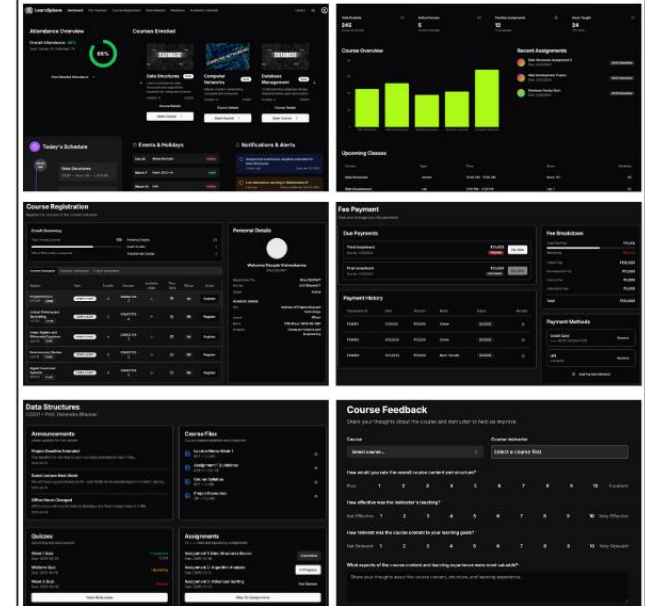


USE-CASE Diagram



Class Diagram

## User Interface



## Unique Selling Point

LearnSphere is a one-stop solution that seamlessly integrates LMS and ERP, streamlining both learning and administration for educational institutions

## Conclusion

LearnSphere simplifies academic administration by integrating secure authentication, student and faculty management, and course enrollment into a unified platform, enhancing efficiency and data integrity for a seamless institutional experience.

## Future Scope

- Expand features for AI-driven personalization
- Establish partnerships with educational institutions
- Integrating Blockchain technology in order to increase security.