

## Online Course Management System (OCMS)

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Project Title: Online Course Management System

Project GitHub link:

### **Project Overview:**

The Online Course Management System (OCMS) is a fully-featured online application that assists universities in managing and organizing course activities more efficiently. Designed for students, instructors, and school administrators, OCMS assists in course creation, student enrollment, assignment management, grading, communication, and reporting.

### **Main Points:**

**Course Management:** The instructors can create, edit, and save courses with lessons, outlines, and schedules.

**Enrollment System:** Students are able to enroll or drop classes online with live seat availability.

**Assignment and Grading:** Assignments and assessments can be created by instructors; digital submission of work by students; auto-calculated grading.

**Dashboard and Reporting:** Role-based dashboards for tracking performance, course progression, and student involvement.

**Communication Tools:** Integrated messaging and announcement tools for student-instructor communication.

**Role-Based Access:** Secure login with different views and permissions for admin, instructor, and student roles.

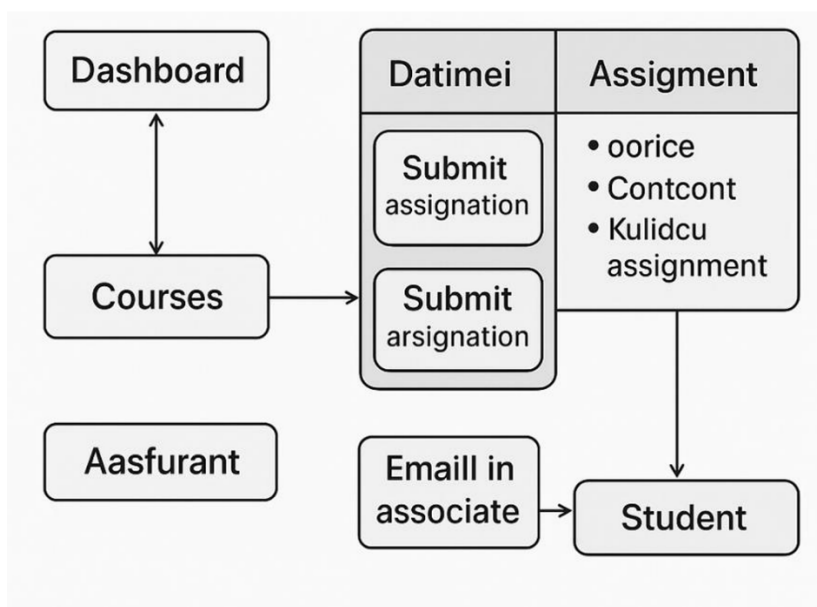
### System Needs:

- Front-end: ReactJS
- Back-end: Flask (Python)
- Database: MySQL
- Hosting: Render or Heroku (demo)
- Browser Support: Chrome, Firefox, Safari, and Edge

### System Architecture (Block Diagram):

Each user (admin, teacher, student) interacts with the system through a customized user interface. Flask manages API routing, session, and backend processes. All course and user data is encrypted and stored in a MySQL database.

Screenshots:



Student dashboard showing enrolled courses and reminders for assignments.

Instructor Interface for grading and course creation.

Admin Panel to handle users and courses

**Highlight Automation:**

- Auto-enrollment seat check availability
- Auto-marking of objective tests
- Automatic reminders for deadlines and announcements

**Made to Impress:**

- Problem Addressed: Course registration and assignment management by hand.
- Technical Achievement: Seamless integration of user roles, real-time updates, and analytics.
- Sophisticated UI/UX: Contemporary interface with minimal effort from users to complete tasks.

OCMS improves online learning management for the entire university, making it better, faster, and more reliable.