Design an E-Learning Platforms

Objective:

The objective is to develop a Web2-based e-learning system tailored to the specific needs of a college environment. This system will facilitate seamless communication between students and faculty, streamline course management, and enhance the overall learning experience. It aims to provide a centralized platform for lecture delivery, assignment submission, grading, and real-time student progress tracking.

Key Features:

Admin Portal:

- User Management: Admins can register and manage faculty and student accounts.
- Course Management: Ability to create, edit, and delete courses offered in the platform.
- Report Generation: View reports on student performance, course progress, and faculty activities.
- **System Monitoring:** Track platform usage, handle support requests, and manage platform-wide settings.
- Announcements: Broadcast notifications or updates to students and faculty.

Faculty Portal:

- Course Creation & Management: Faculty can create and update course content, including lectures, PDFs, and video lessons.
- Assignment & Quiz Management: Upload assignments, set deadlines, and create quizzes with auto-grading options.
- **Student Performance Tracking:** View student progress, grade assignments, and provide feedback.

• **Notifications & Reminders:** Send important announcements regarding classes, assignments, and exams.

Student Portal:

- User Registration & Authentication: Secure login using college credentials.
- Course Enrolment: Browse available courses and enroll in desired subjects.
- **Lecture Access:** View recorded lectures, live classes, and course materials of the enrolled courses.
- Assignment Submission: Submit assignments online before deadlines and track pending submissions.
- Quiz & Exam Participation: Take online quizzes, view results, and track academic progress.
- Grades & Feedback: Access grades, faculty feedback, and performance analytics.
- Push Notifications: Get alerts for upcoming classes, due assignments, and announcements.

Bonus Features:

- Al-based Course Recommendations: Suggest courses based on student interests and past enrollments.
- **Gamification & Leaderboard:** Introduce achievement badges and rankings to encourage participation.
- Offline Access: Allow students to download course materials for offline study.
- **Student-Faculty Chat:** Enable direct communication between students and faculty for academic support.
- Plagiarism Detection: Integrate tools to check for plagiarism in assignments.

Submission Requirements:

Participants are required to submit the following:

- **Deployment Link:** A live URL to the deployed platform for evaluation.
- **Video Demonstration:** A 5-minute (at max) video showcasing key platform features and functionality.
- **Presentation Slides:** (Max 5 slides) covering the idea, tech stack, and implementation details.
- **GitHub Repository Link:** A well-organized GitHub repository with documentation.
- **Project Documentation:** Including system architecture, third-party API integrations, and local setup instructions.

General Rules:

- Only one team member has to register; not all participants have to register individually.
- A team can submit only one entry for the Challenge. Participation in the challenge is subject to a "per-team" basis, i.e., you are not allowed to be in multiple teams.
- Use of third-party libraries, APIs, and frameworks is allowed but must be disclosed.
- Al-generated code/assets are permitted only if disclosed and properly credited.
- Original work only—projects must be built from scratch during the hackathon.
- Pre-existing boilerplate code (like UI templates) can be used but must be disclosed.
- Offensive, illegal, or unethical content is strictly not allowed.
- Submissions must be functional—non-working prototypes will not be considered.
 - Regular commits showcasing various stages of development should be present in the submitted GitHub repository. No commits should be made before the start of the hackathon.

- The coding period is for 24 hours and starts from 10:00 AM, **April 04, 2024** and ends on **April 05, 2024**.
- No commits should be made after the submission of form.

Judging Criteria:

- Implementation of features and adherence to the theme 40%
- User Experience, Design and Creativity (15 + 10 + 5)%
- Code Quality, Documentation & Maintainability (10 + 5 + 5)%
- Video Presentation 5%
- Time of event remaining 5%

Penalty:

- Late Submission: Deduction of 5% from total marks for every 15 minutes late, capped at 50%. After that, the team will be disqualified.
- **Plagiarism:** If found, the team will be subjected to disqualification or marks deduction. The exact degree of penalty will be decided by the judging committee.

"May your code be bug-free and your breakthroughs plentiful. Happy coding!"