

Project Design Phase

Proposed Solution

Date	14 Feb 2026
Team ID	LTVIP2026TMIDS64190
Project Name	LearnHub: Your Center for Skill Enhancement
Maximum Marks	2 Marks

Proposed Solution:

The proposed solution for LearnHub involves building a secure and scalable Learning Management System using the MERN stack (MongoDB, Express.js, React.js, Node.js). The platform is designed to provide structured digital learning with role-based authentication, video-based course management, payment verification before enrollment, progress tracking, and automated certificate generation. It ensures secure interaction between students, teachers, and administrators through RESTful APIs and JWT authentication.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Students lack structured learning platforms with secure access, progress tracking, and certification. Teachers face challenges in managing digital course content efficiently.
2.	Idea / Solution description	Build a MERN-based Learning Management System that provides secure authentication, video-based course management, payment verification, progress tracking, and certificate generation.
3.	Novelty / Uniqueness	Combines secure JWT authentication, role-based access control, payment validation, and automated certificate generation into a single integrated full-stack system.
4.	Social Impact / Customer Satisfaction	Enhances digital education accessibility, ensures proof of completion.
5.	Business Model (Revenue Model)	Freemium model – Free access to selected courses; paid enrollment for premium courses with certification.
6.	Scalability of the Solution	Modular MERN architecture allows easy expansion with cloud deployment, AI integration, and mobile application

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