

Project Design Phase
Solution Architecture

Date	24 JUNE 2025
Team ID	LTVIP2025TMID59454
Project Name	Learning Hub
Maximum Marks	4 Marks

Solution Architecture:

The **Learning Hub** architecture is designed to deliver a seamless, scalable, and personalized e-learning experience. It begins with an intuitive **frontend interface** for students, teachers, and administrators, accessible via web and mobile. The **backend application layer** handles user interactions, course management, and business logic through secure APIs. A robust **learning engine** uses AI to recommend personalized content and learning paths. The platform integrates a **content management system** for storing educational materials and a **real-time communication layer** for chat and live classes. With built-in **analytics, notifications, and security**, the architecture ensures engaging, trackable, and secure digital learning.

- Online Classrooms
- **Competitive Exam Preparation**
- Skill Development & Upskilling
- Homework and Progress Tracking
- **Institutional Learning Management**

Example - Solution Architecture Diagram:

