

**Project Design Phase-II**  
**Solution Requirements (Functional & Non-functional)**

Date	21 June 2025
Team ID	LTVIP2025TMID54785
Project Name	LearnHub: Your Center For Skill Enhancement
Maximum Marks	4 Marks

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Manual registration via a form for students and teachers
FR-2	User Confirmation	Upon form submission, users are immediately registered and can log in without approval delay
FR-3	User Authentication	Secure login using credentials (email and password) with JWT-based token authentication
FR-4	Role-Based Dashboard	Users are redirected to role-specific dashboards (Student or Teacher) after login
FR-5	Course Creation (Teacher)	Teachers can create new courses with title, description, and multimedia content (videos/images/text)
FR-6	Course Management	Teachers can update or delete their created courses
FR-7	Course Viewing (Student)	Students can browse all available courses with previews
FR-8	Course Enrollment (Student)	Students can enroll in available courses from their dashboard
FR-9	Content Access	Enrolled students can view full course content including videos, documents, and images
FR-10	Progress Tracking	Students can track their completion status for enrolled courses
FR-11	Logout	Users can securely log out, ending the JWT session

## Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	LearnHub provides a clean, intuitive, and responsive interface using React, allowing both students and teachers to easily navigate and use the system with minimal training.
NFR-2	<b>Security</b>	User data is protected with JWT-based authentication and secure password storage using hashing. Role-based access ensures only authorized users can access respective dashboards and features.
NFR-3	<b>Reliability</b>	The system is designed to function consistently, ensuring users can register, log in, and access content without interruption. Error handling is implemented to catch and log failures.
NFR-4	<b>Performance</b>	Built with Vite and React for fast loading times and smooth transitions. The application is optimized to handle multiple simultaneous users with minimal lag.
NFR-5	<b>Availability</b>	The platform ensures high uptime and can be hosted on cloud services to maintain continuous access for users. Downtime is minimized through proper deployment and monitoring.
NFR-6	<b>Scalability</b>	The architecture allows for future growth in user base and features. Additional components (like quizzes, certificates, payments) can be added without major redesign.