Solution Requirements

Date	26june,2025
Team Id	LTVIP2025TMID53783
Project name	Learn Hub
Maximum Marks	4 marks

1. 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	- Registration through form- Manual registration via API tool (for admin)
FR- 2	User Login	 Login via email s password- Role-based redirection (Student/Teacher/Admin)
FR-	Course Creation	- Course form submission- Auto assignment of creator as educator
FR- 4	Course Enrollment	 Enroll on click (Student)- Assign courses to students (Teacher)
FR- 5	Section Management	 Add course sections- Embed YouTube video / external articles
FR-	Course Completion	- Mark course as completed- Generate downloadable certificate
FR-	Admin Controls	- View all users- Delete any course- View stats
FR- 8	Dashboard	- Role-specific dashboards- Easy access to course features
FR- G	Navigation s Routing	- Protected routes for authenticated users- Conditional Navbar visibility

2. Non-functional Requirements:

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

NFR No.	Non-Functional Requirement	Description
NFR- 1	Usability	Intuitive UI/UX with responsive design using React Bootstrap.
NFR- 2	Security	Token-based authentication using JWT, protected routes, hashed passwords.
NFR-	Reliability	Uses MongoDB with schema validations and proper error handling on both backend and frontend.
NFR-	Performance	Backend optimized with async/await, UI loading states, API structured for speed.
NFR- 5	Availability	Local and cloud-ready with modular routes, scalable hosting support.
NFR- 6	Scalability	Modular folder structure, easily extendable with more roles or features like quiz, analytics.