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

Date	29 June 2025
Team ID	LTVIP2025TMID60884
Project Name	Revolutionizing Liver care : Predicting Liver Cirrhosis using Advanced machine learning Techniques.
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	Patient/users Registration	Registration through Form Registration through Gmail Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Medical data input	Uploading medical reports (PDF, images, lab results) Manual entry of liver test parameters (e.g., ALT, AST, Bilirubin)
FR-4	Prediction Engine	Run ML model to predict risk of cirrhosis Display risk level (e.g., Low, Moderate, High) Provide insights on contributing factors

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Interface should be intuitive for both patients and healthcare professionals
NFR-2	Security	Data encryption, secure login, compliance with HIPAA / local medical laws
NFR-3	Reliability	System should ensure consistent predictions and minimal downtime
NFR-4	Performance	Model inference should take <5 seconds; UI should respond within 2 seconds

| NFR-5 | **Availability** | Platform must be available 24/7 with >99.5% uptime |
| NFR-6 | **Scalability** | Should handle growing number of users and medical data without performance drop |