

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

Date	28 June 2025
Team ID	LTVIP2025TMID41166
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 Data Entry	Enter patient age, gender, and lab test results through a web form.
FR-2	Prediction Result	Display prediction result (e.g. "High Risk" or "Low Risk" for cirrhosis).
FR-3	Explain Prediction	Show which features influenced the prediction the most.
FR-4	Model Management (Admin)	Allow the admin to upload a new trained ML model file.
FR-5	Activity Logging (Admin)	Keep a log of user activity for security and auditing.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The web interface should be simple and easy for doctors to use without technical knowledge.
NFR-2	Security	Patient data must be protected and transferred securely. No sensitive data should be stored without consent.
NFR-3	Reliability	The system should work correctly and consistently without frequent errors or crashes.
NFR-4	Performance	Predictions should be generated quickly, ideally within a few seconds.
NFR-5	Availability	The system should be accessible whenever doctors need it, with minimal downtime.
NFR-6	Scalability	The solution should be able to handle more users or expand to other diseases in the future.