

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

Date	24 Jun 2025
Team ID	LTVIP2025TMID59671
Project Name	Revolutionizing Liver care: Predicting Liver Cirrhosis Using Advanced Machine Learning
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	Registration through Form
FR-2	User Confirmation	Confirmation via Email
FR-3	Patient Data Entry	Manual entry of patient features(age, bilirubin,albumin,etc.)
FR-4	Prediction using ML Model	Process input data through trained ML model. Predict risk of liver cirrhosis(Yes/No).
FR-5	Results and Reporting	Display results in user-friendly format.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The system should have a clean , intuitive UI so that doctors and users can easily input data and view predictions.
NFR-2	Security	Patient data must be encrypted during storage and transmission to ensure privacy and comply with data protection laws.
NFR-3	Reliability	The model should consistently provide accurate predictions and operate without failure.
NFR-4	Performance	The prediction result should be generated in less than 5 sec after data submission.
NFR-5	Availability	The application should be available 24/7 with minimal downtime to support critical healthcare decisions.
NFR-6	Scalability	The system should support an increasing number of users and large medical datasets without performance degradation.