

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

Date	JUNE 2025
Team ID	LTVIP2025TMID40719
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	User Registration	- Registration through Form - Registration through Gmail
FR-2	User Confirmation	- Confirmation via Email - Confirmation via OTP
FR-3	Patient Data Input	- Manual entry of patient records - Upload via Excel
FR-4	Liver Cirrhosis Prediction	- Generate prediction using trained ML model
FR-5	Report Generation	Download diagnosis report as PDF/CSV
FR-6	Model Management (Admin)	Trigger model retraining - View model accuracy metrics

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Interface must be user-friendly for doctors with minimal technical knowledge
NFR-2	Security	Patient data must be encrypted and access must require authentication
NFR-3	Reliability	The system should provide consistent outputs under same input conditions
NFR-4	Performance	Model should respond with prediction in under 2 seconds
NFR-5	Availability	System should be accessible 24/7 with 99% uptime
NFR-6	Scalability	System should handle increasing number of users and data without performance drop