

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

Date	15 October 2022
Team ID	PNT2022TMID53353
Project Name	Statistical Machine Learning Approaches to Liver Disease Prediction
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	A New user requires a registration to access the facilities offered, otherwise the user can sign in.
FR-2	User Login	The Users who have registered can log in with those credentials.
FR-3	User Requirements	Past Medical records can be stored in a database. Creates a report which indicates whether there is Liver disease present. A diagnostic remedy for the symptoms that you are experiencing.
FR-4	User Entry	A form to be filled out in order to enter the results of pre-diagnostic tests and enter the following details: <ul style="list-style-type: none">● Age of the patient● Gender of the patient● Total Bilirubin● Direct Bilirubin● Alkaline Phosphatase● Alanine Aminotransferase● Aspartate Aminotransferase● Total Proteins● Albumin● Albumin and Globulin Ratio
FR-5	Business Requirements	Diagnose existence or percentage of occurrence of liver disease quickly with the help of a quick blood test. The blood test contains the values of details that are mentioned above. Also, possible symptoms and remedies are visible in the user interface of the website.
FR-6	User Feedback	Once the report is generated, the user can submit a feedback form on the website.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	User friendly interface for interaction with the system
NFR-2	Security	User data to be kept confidential
NFR-3	Reliability	A ML model must be able to predict probabilities with best accuracy to provide a reliable diagnosis
NFR-4	Performance	Predicting the probability with utmost accuracy in reasonable time
NFR-5	Availability	The service is made available to people all around the world regardless of their location
NFR-6	Scalability	More number of users can access the service at the same time without any discrepancies