

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

Date	19/10/2022
Team ID	PNT2022TMID41146
Project Name	Statistical Machine Learning Approaches to Liver Disease Prediction
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Easily usable as it is web based application people can just type URL to get the web page.
NFR-2	Security	Highly secured by getting SSL certificate and using block chain technologies.
NFR-3	Reliability	Consistently good in quality and is trusted because we are securely storing the data in database and no one can steal it and block chain based security is also used.
NFR-4	Performance	Performance is high as we are using various Machine learning algorithms find the best accurate model. And integrate to flask based web application. Therefore performance rich.
NFR-5	Availability	Application will be active once user registers with it and can be used any time needed.
NFR-6	Scalability	Highly scalable as we are going to use IBM Cloud.

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 present in liver disease prediction website
FR-2	User Confirmation	Confirmation via Email. An email will be sent to user on registered email for confirmation.
FR-3	Patient details like age, proteins, enzyme etc	Collected via website input fields
FR-4	Prediction	Based on liver enzymes, proteins, age and gender using them to try and predict the likeliness of liver disease.
FR-5	Retrieval(Database)	Whenever we need user data we can get it from database.
FR-6	Internet connection	As it is web based application user must have internet connectivity to access it.

Non-functional Requirements:

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