

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

Date	16 October 2022
Team ID	PNT2022TMID14539
Project Name	Project - 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 Input	First the user enters the blood test details in the GUI of the prediction System.
FR-2	Prediction Model	Applying techniques of Supervised machine learning algorithms such as Decision tree, Support Vector machine, logistic regression etc,.By learning the pattern of the blood content using the above algorithms it predict the probability whether the person is affected by liver disease or not
FR-3	User Output	The GUI show the predicted output by the model to the user.
FR-4		

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The people who are all have English knowledge can use this model.
NFR-2	<b>Security</b>	Watson assistant has certifications such as ISO,SOC2,US HIPAA, European Union GDPR,PCI DSS. We use security systems such as TCS/SSL,IPSEC ,Third party CAs, HTTPS, Encrypted file systems, Encrypted storage systems, Key management systems, AES -256 bit.
NFR-3	<b>Reliability</b>	Data Type –Dialog Query, Intent etc. Configurations done using small integration Code snippets such as Javascript , SQL and can also be done using Watson APIs.
NFR-4	<b>Performance</b>	This solution works for patients who don't have time to visit hospitals.
NFR-5	<b>Availability</b>	The Web interface is made available using load balancers, distributed servers etc.
NFR-6	<b>Scalability</b>	