Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	15 October 2022
Team ID	PNT2022TMID04221
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	The user registration process includes the creation of account through either email id or phone number with new password through the website.
FR - 2	User Login	The existing user can directly login to the website by giving the Login credentials.
FR - 3	Admin Login	The admin can login to the website where the admin can find the analysis of the predicted data.
FR - 4	Upload Image	The user can upload the scanned image of liver in the dropdown menu from various assets like (drop box, gallery etc.,)

FR-5	Enter Data	The user can enter the required data from the scanned reports.
FR - 6	Prediction	The data entered by the user is tested with the trained model in the Watson studio to predict whether the user has liver disease or not.
FR-7	Display	The result will be displayed in the application.
FR-8	Report generation	The result of the tested data will be generated as report in the form of PDF and stored in the user login and also it will automatically download to the user system.

Non-functional Requirements:

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

NFR No.	Non-Functional Requirement	Description
NFR - 1	**Usability**	The application can be easily accessible by any type of individuals, the aged individual and affected by liver disease can also use this tool for Diagnosis.
NFR - 2	**Security**	Data security is important to store the customer data in the secured manner. The information should not be leaked outside.
NFR - 3	**Reliability**	Should provide results with more accuracy compared with existing solutions and consume less time than other existing solutions.
NFR - 4	**Performance**	The ability of Machine Learning is to perform pattern recognition by creating complex relationships based on input data and then comparing it with performance standards is a big step also to diagnosis in short time.
NFR - 5	**Availability**	Healthcare affordability, standards, and accessibility is made much more easier using this platform and the application will be available to all kinds of users.
NFR - 6	**Scalability**	The application must hold stable even when multiple users are using it at the same times.