

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

Date	14 October 2022
Team ID	PNT2022TMID13704
Project Name	Detecting Parkinson's Disease using Machine Learning
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 Authentication	The users must be registered first and can be only able to access the web application. This is to ensure that the web application is used for a good reason.
FR-2	Web Service Management Process	Web Service Management process by Web Portal admin in registering web client to do SSO or member data communication. The web page is hosted in cloud.
FR-3	Data Management	The Web server and Portal manager can have access to data to edit and update again to server.
FR-4	Testing	Applying the algorithms on the test data
FR-5	Confirmation	Display the result with the description of having Parkinson's or not

**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 webpage loading for users submitting their image input details at the web application must be loaded fast than rendering more time.
NFR-2	<b>Security</b>	Authorization access scenarios and definitions, hand-over procedures for patient records. The image and other inputs of patients must be highly secured and can't be accessible to others.
NFR-3	<b>Reliability</b>	The prediction of the system must be with higher accuracy so that the output from the application can be trusted by the users without any doubts and can be used for further dragonising process with Doctors.
NFR-4	<b>Performance</b>	The landing page supporting 5,000 users per hour must provide 6 second or less response time in a Chrome desktop browser, including the rendering of text and images and over an LTE connection and the uploading of Data (image) must also should be fast and the output page should be rendered within seconds.

NFR-5	<b>Availability</b>	The web application should be available to all Doctors across the globe and can be implemented in every hospital so that the patients can use it effectively .
NFR-6	<b>Scalability</b>	The System must function using Cloud and during a down process also it must satisfy the maximum number of clients. . The system must use higher RAM and CPU processing in Server to handle multiple request at same time.