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

Date	03 October 2022
Team ID	PNT2022TMID26216
Project Name	Project – Detection of 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 Registration	Registration through Form
FR-2	User Confirmation	Confirmation via Email
FR-3	Input Data	User feeds the data set that contains various parameters that should be taken into account, especially the hand drawn wave and spiral patterns of the patients
FR-4	User authorization	A medical professional / organization or a patient will be verified to prevent fraudulent indulgence
FR-5	Classification of data	The website gives the result by categorizing the hand drawn patterns with the help of the pressure and tremor calculated.
FR-6	Report Generation	Reports will be produced in accordance with data fed.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The application can be used for accurate prediction and classification of the presence and severity of Parkinson's disease (based on hand drawn pattern)
NFR-2	Security	User's data is well encrypted using efficient algorithms of machine learning
NFR-3	Reliability	The application is monitored regularly in terms of the ability, quality and availability of constant prediction of the correct result
NFR-4	Performance	It classifies the images and predicts the disease with careful accuracy output. It reduces hectic calculations of the data set. Thus it works faster and

		efficiently
NFR-5	**Availability**	The application is active throughout the day. While awaiting the prediction result, user can interact with chat bot for knowing important details. If the application doesn't respond for the user, then the automated chat bot will forward the issue to our server then it can be resolved at that instance. It is compatible to all the operating systems.
NFR-6	**Scalability**	It does not request money or bank details to setup their account and download their final medical result from the application .