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

Date	23October 2022
Team ID	PNT2022TMID39642
Project Name	Project – 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 Registration	Registration through Form Registration through Gmail Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Authentication	The users must be registered first and can be only able to access the web application.
FR-4	Input Data	Application received the data and processes its roles. Input hand drawn Spiral images and Input hand drawn Wave images.
FR-5	Data classification	Classification of the real data for the user. Application classifies the data by giving the user input to the pre-trained ML model.
FR-6	Medical recommendations	User receives the medical suggestions and assistance for to offer speed
FR-7	Report Generation	Application generates a report for the person with the prediction that has been made by the model.
FR-8	Accuracy verification	Accuracy is determined in the application.

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 classifier of the true and fake input data sample. • Usable by multiple users at the same time

NFR-2	**Security**	• User's data is well encrypted using stable machine learning algorithms. • The image and other inputs of patients must be highly secured and can't be accessible to others.
NFR-3	**Reliability**	• The application is monitored periodically in terms of its constant prediction ability, quality, and availability towards the user.
NFR-4	**Performance**	• Detection of the disease is accurate. • Response time of predicting is low
NFR-5	**Availability**	• The application is active throughout the day. While awaiting the prediction result, User can interact with the chatbot for knowing important details. • If the application doesn't respond for the user, then the automated chatbot will forward the issue to our server then it can be resolved at that instance.
NFR-6	**Scalability**	• Application performs well under an increased workload.