

Project Design Phase-II

Solution Requirements (Functional & Non-Functional)

Date	10 October 2022
Team ID	PNT2022TMID27729
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 requirements (Story/ Sub-Task)
FR-1	User Registration	<ul style="list-style-type: none"> ❖ Registration through Form ❖ Registration through Gmail ❖ Registration through LinkedIn
FR-2	User Configuration	<ul style="list-style-type: none"> ❖ Confirmation via Email ❖ Confirmation via OTP
FR-3	User Interface	<ul style="list-style-type: none"> ❖ Admin Login Form ❖ Graphical user interface for non-computer literate PD patients
FR-4	Database	<ul style="list-style-type: none"> ❖ Gene4PD
FR-5	Operating System	<ul style="list-style-type: none"> ❖ Windows 10
FR-6	Software	<ul style="list-style-type: none"> ❖ Spyder ❖ Google collab
FR-7	Tools	<ul style="list-style-type: none"> ❖ Web Browser
FR-8	Python Libraries	<ul style="list-style-type: none"> ❖ Numpy, pandas, matplotlib, seaborn, sklearn,
FR-9	Detecting Parkinson's disease	<ul style="list-style-type: none"> ❖ Identifying rare variants from PD patients using images such as Waves and Spiral
FR-10	Input File Format	<ul style="list-style-type: none"> ❖ png
FR-11	Supported Browser	<ul style="list-style-type: none"> ❖ Google Chrome ❖ Firefox ❖ Microsoft Edge
FR-12	Algorithm	<ul style="list-style-type: none"> ❖ Logical Regression ❖ Random Forest Classifier

Non-Functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	❖ Easy-to-use
NFR-2	Security	❖ IBM Cloud offers Data security service which includes Data discovery, Data activity and encryption
NFR-3	Reliability	❖ Easy to use ❖ Portable ❖ Flexibility
NFR-4	Performance	❖ High-performance and Productivity for users
NFR-5	Scalability	❖ Perfectly scalable to handle workload and how agile it is at accomplishing that task