Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID39642
Project Name	Project – Detecting Parkinson's Disease Using Machine Learning
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The main aim is to predict the prediction efficiency that would be beneficial for the patients who are suffering from Parkinson and the percentage of the disease will be reduced. Generally, in the first stage, Parkinson's Disease can be cured by the proper treatment. So, it's important to identify the Parkinson's Disease at the early stage for the betterment of the patients. The main purpose of this research work is to find the best prediction model i.e., the best machine learning technique which will distinguish the Parkinson's patient from the healthy person. The techniques used in this problem are KNN, Naïve Bayes, and Logistic Regression.
2.	Idea / Solution description	Prediction of Parkinson's disease with higher accuracy and estimation using web application which will help stakeholders such as the government and health insurance companies. It can identify patients at risk of disease or health conditions.
3.	Novelty / Uniqueness	It identifies patients at risk of disease or health conditions at early stages. The use of OpenCV techniques to eliminate even the use of paper for the drawing test also contributes to the novelty factor. The application in case of a prediction leaning to a confirmation of the condition can provide awareness and various information about the condition including location and other details of treatment centres and specialists. Since the application must work with the patients physical and personal information, the security factor is of paramount importance. The usage of OTP verified authentication means is novelty factor.

4.	Social Impact / Customer Satisfaction	• Increases interaction with the human and application. • Personalize the UI experience. • Improves accurate result as expected. • An automated chatbot controls the user interaction environment. • Accurate prediction at good time complexity
5.	Business Model (Revenue Model)	The platform is free. It can used by people pertaining to all age groups with limited technical knowledge and can be prescribed to others. The model helps to increase economic status and has easy user interface.
6.	Scalability of the Solution	Highly scalable. Produces accurate results with small and large amount of data. It may be accessed by any number of people and advancement of chatbots can be introduced. It does not require for the users to spend some money in offering their basic data into the model. On the spot result for the users