Project Design Phase-1
Proposed Solution Template

Date	September 19 2022
Team ID	PNT2022TMID03453
Project Name	Detecting Parkinson's Disease using MachineLearning
Maximum Marks	2 Marks

Proposed Solution Template:

Sno.	Parameter	Description
1.	**Problem Statement (Problem to be solved)**	Parkinson's disease is caused by the disruption of brain cells that produce a substance to allow brain cells to communicate with each other called dopamine. It is a progressive disorder of the central nervous system affecting movement and inducing tremors and stiffness. The symptoms usually emerge slowly, and as the disease worsens, non-motor symptoms become more common.The most obvious early symptoms are tremor, rigidity, slowness of movement, and difficulty with walking.
2.	**Idea / Solution Description**	Early detection is necessary. As there is currently no cure. Thus ,by using this application, the disease can be detectedearly so that the patient can change theirlifestyle to control the effects of the disease.

3.	**Novelty / Uniqueness**	The XGBoost algorithm used for detecting Parkinson's disease incorporates a sparsity-aware split finding algorithm to handle different types of sparsity patterns in the data. Out-of-core computing featureof the XGBoost algorithm optimizes the available disk space and maximizes its usage
4.	**Social Impact / Customer Satisfaction**	Helps in detecting the disease and is efficient in finding the disease, as well is cost efficient.

5.	**Business Model (Revenue Model)**	It is User-friendly. Anyone can use this application with ease.
6.	**Scalability of the Solution**	XGBooster with different calculations the exactness, accuracy, review, and so forth is extremely excellent.XGBooster is not only able to keep up with all those other algorithms but exceeds them in performance.XGBoost can solve real-worldscale problems using a minimal amount of resources.