

**Project Design Phase-I**  
**Proposed Solution Template**

Date	3 October 2022
Team ID	PNT2022TMID32832
Project Name	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)	Detection of Parkinson's disease using the drawings made by the subjects instead of measuring the speed and pressure of the pen on paper to classify them. Our goal is to quantify the visual appearance of these drawings.
2.	Idea / Solution description	ML based application for detection of the symptoms of Parkinson's disease at the early stage and to train a machine learning model to differentiate between healthy and the affected.
3.	Novelty / Uniqueness	By using the predict log probability function by random forest classifier we will be able to accurately find out the percentage affected in the subject to automatically predict Parkinson's disease.
4.	Social Impact / Customer Satisfaction	By using machine learning approaches, we may therefore identify relevant features that are not traditionally used in the clinical diagnosis of Parkinson's disease and rely on these alternative measures to detect the disease during the early stage.
5.	Business Model (Revenue Model)	
6.	Scalability of the Solution	By using predict log probability function we will be able to find the accurate percentage affected in an individual due to the disease which is not present in the existing ones as it predicts only if the individual has Parkinson's disease or not which makes the project scalable. The project maybe more scalable if deep learning methods are implemented as it may give more accurate results.