

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

Date	19 September 2022
Team ID	PNT2022TMID24158
Project Name	Project - Detecting Parkinson's Disease using Machine Learning
Maximum Marks	2 Marks

**Proposed Solution Template:**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Early and Automatic detection of Parkinson's Disease in hand drawn images.
2.	Idea / Solution description	Detection is done by using Histogram of Oriented Gradients (HOG) image descriptor along with a Random Forest classifier.
3.	Novelty / Uniqueness	In this method, the approach to predict Parkinson's disease from hand-drawn wave and spiral images using computer vision and machine learning techniques has been recommended. The previous methods have their constraints.
4.	Social Impact / Customer Satisfaction	People can detect the disease at a very early stage and improve the quality of living. They can take proper precautions and lead a healthy and safe life.
5.	Business Model (Revenue Model)	It is cost efficient as it is a Software as a Service Platform. People need not spend much money to detect the disease.
6.	Scalability of the Solution	Better execution in accuracy, sensitivity, and specificity as well as in system design flexibility.