Project Design Phase-I
Proposed Solution Template

Date	13 October 2022
Team ID	PNT2022TMID04456
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)	More than 10 million people are living with Parkinson's Disease worldwide, according to the Parkinson's Foundation. While Parkinson's cannot be cured, early detection along with proper medication can significantly improve symptoms and quality of life. Detecting Parkinson's disease from the spirals and waves drawn by the patients using a Machine Learning Model is the Problem Statement.
2.	Idea / Solution description	One of the major symptoms of Parkinson's disease is tremors or rhythmic shaking of the carpals (hands). This results in slower drawing speed and lower pen pressure in Parkinson's patients. A direct result of this is that the spirals and waves drawn by the Parkinson's patients look significantly different. Thus, the spirals and waves drawn are used to determine if the patient has Parkinson's disease.
3.	Novelty / Uniqueness	Currently, there is no test similar to this in the market. All other available tests are medically invasive in nature and need financial remittance to conduct. This test is completely free making it more accessible.
4.	Social Impact / Customer Satisfaction	This will help countless potential patients get a quicker diagnosis which will result in better quality of life due to being prescribed the correct medication that will help in improving the symptoms.
5.	Business Model (Revenue Model)	Increase in traffic to the website is a direct reflection of the increased users which will ultimately help in increasing the ad revenue of the developer of the website.
6.	Scalability of the Solution	This solution can gradually be expanded to also include diagnoses for diseases like Essential Tremor and Normal Pressure Hydrocephalus, both of which manifest in the form of slowness (bradykinesia), stiffness (rigidity), and resting tremor.