

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

Date	27 september 2022
Team ID	PNT2022TMID33700
Project Name	FertilizersRecommendation System For Disease Prediction
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)	Create a system for predicting crops according to soil details, predicting fertilizers according to soil and crop details, and detecting diseases in the plant.
2.	Idea / Solution description	1. Developing a user-friendly web-based system for farmers. 2. By providing their soil details like nitrogen, phosphorus, potassium, pH level farmers get the idea of which crop is best for their soil.
3.	Novelty / Uniqueness	The proposed algorithm with the existing public datasets. Also, various segmentation algorithms can be implemented to improve accuracy. The proposed algorithm can be

		modified further to identify the disease that affects the various plant organs such as stems and fruits.
4.	Social Impact / Customer Satisfaction	Dealing with unsatisfying contours, which would try and make their way through every possible grab cut in the border of the leaf. The proposed solution uses the polygonal model obtained after the first step not only as an initial leaf contour but also as a shape prior that will guide its evolution towards the real leaf boundary.
5.	Business Model (Revenue Model)	Support Vector Machine(SVM) SVM is a binary classifier to analyze the data and recognize the pattern for classification. The main goal is to design a hyperplane that classifies all the training vectors in different classes. The objective of SVM is to identify a function $F_x$ which obtains the hyper-plane. Hyperplanes separate two classes of data sets.

6.	Scalability of the Solution	<p>True Positive: True Positive is an outcome where the model correctly predicts positive class.</p> <p>False Positive: False Positive is an outcome where the model incorrectly predicts positive class.</p> <p>True Negative: True Negative is an outcome where the model correctly predicts</p>
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		<p>negative class.False Negative: False</p> <p>Negative is an outcome where the model incorrectly predicts negative class .</p>
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