

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

Date	2 October 2022
Team ID	PNT2022TMID21312
Project Name	Fertilizers recommendation system for disease prediction
Maximum Marks	2 Marks

**Proposed Solution Template:**

Sl. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>The problem statement is that when a crop's leaf image is given as the input to an AI model, the essential features from the leaves are taken, analyzed.</p> <p>The AI model will predict the disease and will suggest a suitable fertilizer to cure the disease that the crop has been infected with.</p>
2.	Idea / Solution description	<p>In order to predict the disease and to suggest a suitable fertilizer to cure the disease that the crop has been infected with, an artificial intelligent system has to be introduced to provide farmers with the best solution possible.</p>
3.	Novelty / Uniqueness	<p>AI model developed will be able to predict the disease accurately and able to suggest suitable fertilizer for the disease that the crop has been infected with while the input is only the image of the leaf of the infected crop.</p>
4.	Social Impact / Customer Satisfaction	<p>The AI model is built in a way such that each farmer can get benefitted and fully satisfied in terms of production as well quality of the goods produced without spending huge amount of money.</p>
5.	Business Model (Revenue Model)	<p>Employing an AI model will be a cost-effective solution for agriculture. It eliminates the need for soil testing and the results are provided instantly and much faster than conventional methods for crop disease prediction.</p>
6.	Scalability of the Solution	<p>The AI model developed can be scaled to predict the source of the disease when the crop's leaf image is given as an input and also can be scaled to suggest suitable relevant diseases that the crop might get infected in the future as well.</p>