

Project Design Phase-I
Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID10926
Project Name	Project – Fertilizers Recommendation 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)	<ul style="list-style-type: none"> ➤ The main cause of production loss in agriculture products is due to the different types of diseases that affect the plants growth. ➤ Farmers are unable to detect crop diseases due to a lack of knowledge and old practices. ➤ The plant disease is one of the major problem in agricultural field. If the plant is affected by a leaf disease, it reduces the growth of Plant and productiveness.
2.	Idea / Solution description	<ul style="list-style-type: none"> ➤ Image processing helps in identification of the plants specification and disease detection that helps in classifying the plants based on disease. ➤ Predicts the plant disease and recommend suitable fertilizers for the Plant. By using CNN, the software analysis the plant image and detect the disease and recommend fertilizers.
3.	Novelty / Uniqueness	<ul style="list-style-type: none"> ➤ Farmer can order the available fertilizers in online and the software recommends both organic and inorganic fertilizers. ➤ Implement Smart Irrigation system For farms to get higher yield.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> ➤ Providing Complete irrigation data through cloud computing. ➤ By identifying the diseases and recommending the fertilizer at the earlier stage helps in the improvement of production and the quality.

5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> ➤ Helps the farmers to make good production of food products and to reduce the production loss at an earlier stage. ➤ For crop yield prediction Support Vector Machine is good.
6.	Scalability of the Solution	<ul style="list-style-type: none"> ➤ The software will predict accurate solution based on the trained data.