Project Design Phase-I
Proposed Solution Template

Date	25 September 2022
Team ID	PNT2022TMID33299
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)	Agriculture is the most important sector in today's life. Most Plants are affected by a wide variety of bacterial diseases. Plant Diseases are a major constraint on the production and a major threats to food security. Hence, early and accurate identification of plant diseases is essential to ensure high and best quality of agricultural products. In recent times, the number of diseases on plants has increased due to the variation of pathogenic conditions and changes in cultivation methods.
2.	Idea / Solution description	Deep learning techniques are used to identify the diseases and suggest the precautions that can be taken for those diseases. An automated system is introduced to identify the different diseases on plants by checking the symptoms shown on the leaves of the plant.
3.	Novelty / Uniqueness	Identify the leaf disease is an important role of agriculture preservation. After Pre-Processing using a median filter, Segmentation is done and classify the disease based similarity measure is used for fertilizer recommendation.
4.	Social Impact / Customer Satisfaction	The proposed model will be very helpful for the farmers, to identify the right fertilizer and safeguards their crops. Therefore it leads to more crops yield and also reduces the loss.
5.	Business Model (Revenue Model)	It provides more profit to farmers and produces healthy crops. The System comes with a model to be precise and accurate in predicting crop yield and deliver the user with proper recommendations about fertilizer ratio based on atmospheric conditions and soil parameters to increase the crop yields.
6.	Scalability of the Solution	In many disease such as most leaf spots, root and rusts in which plants are counted as disease whether they are exhibiting a disease of greater importance to the crop. Fertilizers can be

		recommended based on the disease predicted at the earliest.