Project Design Phase-I
Proposed Solution

Date	19 September 2022
Team ID	PNT2022TMID27490
Project Name	Project - Fertilizers Recommendation System For Disease Prediction
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Agriculture is the heart and life of most Indians. But in recent days, the field was going down due to various natural calamities. Most plants are affected by a wide variety of bacterial and fungal diseases. Plant disease, especially on leaves, is one of the major factors that reduce the yield in both quality and quantity of the food crops. Finding the leaf disease is an important role to preserve agriculture. Hence, early and accurate identification of plant diseases is essential to ensure high quantity and best quality. Smart analysis and Comprehensive prediction models in agriculture helps the farmer to yield the right crop at the right time.
2.	Idea / Solution description	In our proposed project, we present an automated system to identify different diseases on plants by checking the symptoms shown on the leaves of the plant. Image of a leaf of the plant is fed into the system using which the diseases on the plant are identified. Deep learning techniques are used to identify the diseases and suggest the precautions that can be taken for those diseases.
3.	Novelty / Uniqueness	We make use of deep learning techniques such as CNN to predict the plant disease using the image of leaf of the plant. The number of models developed for fertilizer recommendation is limited and the proposed model serves as the promising aspect in the planning of crops.
4.	Social Impact / Customer Satisfaction	The proposed work enhances agricultural production and productivity by offering smart technology which will recommend fertilizers for crops and soil respectively. The farmers can use this technology anytime and anywhere. This will help in raising the living standard of farmers and will boost their economic growth.

5.	Business Model (Revenue Model)	As the fertilizers are being recommended at the early stage, loss can be minimised and the yield can be increased. Since we provide recommendations there is no need for expert advice or recommendation. This will save cost and time for the users.
6.	Scalability of the Solution	This system can be accessed online without paying. It can be accessed via any browser of your choice. It can predict plant diseases with high accuracy.