Project Design Phase-I
Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID29985
Project Name	Project – Fertilizer recommendation system for disease prevention
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)	1. India is an agrarian nation. 2. But creating a profitable yield for the farmer in each crop cycle is becoming a major challenge on various factors. 3. Picking the reasonable fertilizer for the land, preventing for diseases and yield is an important and basic part of agriculture. 4. Deciding the supplement levels in soil utilizing lab hardware can be restrictively costly, particularly in developing nations. 5. This venture is extremely valuable to farmer to pick the right fertilizer toward the start of product cycle and amplify the yield.
2.	Idea / Solution description	1. Detection and recognition of plant diseases using machine learning are very efficient in providing symptoms of identifying diseases at its earliest. 2. Plant pathologists can analyze the digital images using digital image processing for diagnosis of plant diseases. 3. The characteristic symptoms are generated based on the differentiation between normal physiological functionalities and abnormal physiological functionalities of the plants.

3.	Novelty / Uniqueness	1. A digital camera or similar devices are used to take images of different types, and then those are used to identify the affected area of plants. 2. Then different types of image-processing techniques are applied to them, it process those images, to get different and useful features needed for the purpose of analyzing Plant disease identification. 3. This is the uniqueness of the project.
4.	Social Impact / Customer Satisfaction	1. At the end , our model detects and distinguishes between a healthy plant and different disease plant and provides suitable remedies so as to cure the disease. 2. So that, farmers can cure the plant disease without wasting money and time. 3. This increases the yield and also helps to gain more income.
5.	Business Model (Revenue Model)	1. The cost of curing plant disease will be less when farmer use this concept comparing to lab tests etc…, 2. The main goal of the project is to reduce the time, cost of the farmers by curing the plant disease through this concept.
6.	Scalability of the Solution	1. By using this concept the time reduces, the cost for curing plant disease also gets reduced.