Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID32299
Project Name	Fertilizers Recommendation System for Disease Prediction
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The soil fertility is destroying day after day due to use of more chemical fertilizers. The fertilizer problem is both acute and complex. It has been felt that organic manures are necessary for keeping the soil in good health. The utilization of this potential will solve the problem of disposal of waste and providing manure to the soil.
2.	Idea / Solution description	The Idea in general is to use algorithms which gives according to historical data of the classifications of soil. then make a mapping spell between the existing data of soil, weather and crops and an input entered, user to know the type of crop adapted to his soil in addition to that the amount of appropriate fertilizer.
3.	Novelty / Uniqueness	Novelty is one of the important metrics of customer satisfaction. There is an increasing realization in the Fertilizer Recommender Systems (RS) field that novelty is fundamental qualities of recommendation effectiveness and added-value.
4.	Social Impact / Customer Satisfaction	Synthetic fertilizers contain high amounts of acidic chemicals lot of acid, and can therefore burn the skin negatively impact soil quality, and burn plants. Fertilizers provide nutrients that plants need to grow, but as a cost, plants can grow more quickly than what their roots can sustain. This can result in weak plants that are more vulnerable on their own to pests and diseases.
5.	Business Model (Revenue Model)	The fertilizer recommendation model is developed by using the FP algorithm. The fertilizer recommender calculates all of the fertilizer combinations that will suit the crop's needs at the lowest cost. Farmers can use the web and Android-based mobile devices to access the system.
6.	Scalability of the Solution	For maintaining of soil quality and attainable crop yield, it is required to add proper amount of fertilizers and minimize the misuse of soil resources which is possible by knowing actual situation of soil physical, chemical and biological condition through observation, investigation and soil testing.