Ideation Phase Define the Problem Statements

DATE	19 SEPTEMBER 2022
TEAM ID	PNT2022TMID46542
PROJECT NAME	Fertiliser recommendation system for disease prediction
MAXIMUM MARKS	4 marks

Define Problem Statement:

We recommend the best fertiliser for every particular crop is also a challenging task. And the other and most important issue is when a plant gets caught by heterogeneous diseases that effect on less amount of agriculture production and compromises with quality as well. Some of the diseases look almost similar to farmers often leaves made them confused. In case the farmer makes wrong predictions and uses the wrong fertilisers or more than the normal dose (or) threshold or Limit (every plant has some threshold fertilisers spraying to be followed), it will mess up the whole plant (or) soil and cause enough damage to plant and fields. Farmers usually detect the crop diseases with their naked eye which makes them take tough decisions on which fertilisers to use. It requires detailed knowledge about the types of diseases and lot of experience needed to make sure the actual disease detection. To prevent this situation we need better and perfect guidance on which fertilisers to use, to make the correct identification of diseases, and the ability to distinguish between two or more similar types of diseases in visuals. A major problem of farmers do not have the knowledge to select appropriate crops and fertilisers. Moreover, crop failure due to disease causes a significant loss to the farmers, as the consumers. While there have been recent developments in the automated detection of these diseases using Machine Learning techniques, the utilisation of Deep Learning Suggesting the use of fertilisers may help the farmers to make the best decision for their cropping situation. The model applied for prediction of crop yield By the use of Data Mining, we can also predict the crop yield. By fully analysing the previous data we can suggest the farmer for a better crop for the better yield. This application also provides a model which predicts the type of crop disease based on textural similarity of leaves.

PROBLEM STATEME NT	I AM	I AM TRYING TO	BUT	BECAU SE	WHILE MAKES ME FEEL
PS 1	Farmer	use the correct fertiliser for prediction of different crop diseases and trying to increase the best quality and quantity of crops	It takes more time to find the correct and recommend best fertilisers for prediction of different crop diseases	I don't want to reduce the quality and quantity of crops	frustrated and incapable of cultivating the crops
PS 2	Gardener	Use to determine the plant disease and recommend correct fertiliser	It depends on the database plant diseases. Unknown diseases cannot be predict	I don't like the plants are withered	Escy to determine the plant diseases

PROBLEM STATEMENT

I AM (Customer)

Farmer

I AM TRYING TO

use the correct fertilizer for prediction of different plant diseases and trying to increase the best quality and quantity of crops BUT

can't find the correct and recommend best fertilizers for prediction of different plant diseases BECAUSE

I don't want to reduce the quality and quantity of crops WHILE MAKES ME FEEL

frustrated and incapable of cultivating the crops