

GOVERNMENT COLLEGE OF ENGINEERING, BARGUR

DEPARTMENT OF ELECTRONICS AND

COMMUNICATION ENGINEERING

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IDEATION PHASE

PROBLEM STATEMENT

Date	19 September 2022
Team ID	PNT2022TMID06694
Project Name	Fertilizers Recommendation System for Disease Prediction
Maximum Marks	2 Marks

Problem Statement:

Agriculture is the most important sector in today's life. Most plants are affected by a wide variety of bacterial and fungal diseases. Diseases on plants placed a major constraint on the production and a major threat to food security. Hence, early and accurate identification of plant diseases is essential to ensure high quantity and best quality. In recent years, the number of diseases on plants and the degree of harm caused has increased due to the variation in pathogen varieties, changes in cultivation methods, and inadequate plant protection techniques. Our project is proposed to build an automated system which is introduced to identify different diseases on plants by checking the symptoms shown on the leaves of the plant. Deep learning techniques are used to identify the diseases and suggest the precautions that can be taken for those diseases.

I am	Farmers are the customers working in the cultivation land. People who Grow Crops and facing Issues of Plant Disease.
I'm trying to	An automated system is introduced to identify different diseases on plants by checking the symptoms shown on the leaves of the plant and recommendation of the fertilizers by image processing.
But,	Protecting crops in organic farming is not an easy task. Plant disease, especially on leaves, is one of the major factors of reductions in both quality and quantity of the food crops. Fertilizer Recommendation is not taken into consideration. Due to the changing climatic conditions, accurate results cannot be predicted by this system.
Because	Fertilizer is double-edged sword. It is productivity but destructive power, which depends on application amount. Having some reasonable knowledge of application of fertilizer can avoid unnecessary waste in the purchase of fertilizers and increase the yield of crops.
Which makes me feel	These things make feel that it can't protect my crops and get loss in my investment. So, I wish to get expert knowledge to save my field.



Problem Statement (PS)	I am	I'm trying to	But	Because	Which makes me feel
PS	Farmer	Farmer try to produce healthy plants and more yield.	Plants get affect by some diseases and I unable to predict.	Farmers are not aware of what I should do to predict and product it.	I should get expert knowledge to save my field.