V.S.B ENGINEERING COLLEGE, KARUR

Department of Computer Science and Engineering

IBM NALAIYA THIRAN

Project Design Phase-I

Proposed Solution

Date	01October 2022
Team ID	PNT2022TMID33290
Project Name	Fertilizers Recommendation System for disease prediction
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)	Agriculture is having a great impact on the country's economy. Different diseases effect plant that reduces their production and is a major threat to food security. The major problemsthat the farmers of our country are currently facing includes Crop Failure, Lack of adequate knowledge, Crop damage due to ignorance/carelessness, Lack of professional assistance, Inaccessibility to agro-tech solutions. Most of the diseases are detected in later stage that to manually which is time consuming and results in heavy loss so it is important to build an automated system that detects disease at early stage and provides fertilizer recommendation accordingly.

2.	Idea / Solution description	An automated system is built that takes the input as picture of leaves which is uploaded by the user, identifies 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 fertilizer needed for the plant.
3.	Novelty / Uniqueness	It does not require user to consult any specialist for identification of diseases that affected the leaves

		and the fertilizers that is required for the same. It detects Plant disease at their early stage.
4.	Social Impact / Customer Satisfaction	The whole process of identifying disease and recommendation of fertilizer happens just by uploading image so it is user friendly. It helps farmers to get good yield out of the crop. People will get good quality food products.
5.	Business Model (Revenue Model)	Social media is the best way to spread the word about our application. And with the influencers we can reach out to people. Clustering and targeting thefarmers for identifying diseases on their plants and recommending them fertilizers for the same
6.	Scalability of the Solution	It can be used in research areas to study about the diseases in plant and the best fertilizer that can be recommended for it among the list of fertilizers available .It can be used by anyone in the world