

# VSB ENGINEERING COLLEGE, KARUR

## Electronics and Communication Engineering

IBM NALAIYA THIRAN

### Project Design Phase-I

#### Proposed Solution Template

Date	23 September 2022
Team ID	PNT2022TMID33603
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)	Infectious plant diseases are caused by a pathogenic organism such as fungus, bacterium , mycoplasma, virus, viroid, nematode, or parasitic flowering plant. An infectious agent is capable of reproducing within or on its host and spreading from one susceptible host to another.
2.	Idea / Solution description	SVM K-Mean Clustering algorithm, Otsu's detection converting RGB to HIS later segmentation is done using boundary and spot detection algorithm. These are the ideas to detect the plant diseases. Reducing the level of the infestation involves cultural practices, such as sanitation, removing diseased plants or plant parts, rotating crops, eliminating weeds or other plants that may be alternate hosts for the disease, and discouraging or preventing insect vectors.
3.	Novelty / Uniqueness	Monitor the big farms of crops, very early stage itself it detects the symptoms of diseases. Reduce the loss of time. Reduce the future plant losses. RF algorithm is used to detect.

4.	Social Impact / Customer Satisfaction	Without proper identification of the disease and the disease-causing agent, disease control measures can be waste of time and money and can lead to further plant losses.
5.	Business Model (Revenue Model)	Identification of Plant-Leaf Diseases Using CNN and Transfer-Learning Approach
6.	Scalability of the Solution	To achieve Infectious plant diseases are caused by a pathogenic organism such as fungus, bacterium , mycoplasma, virus, viroid, nematode, or parasitic flowering plant. An infectious agent is capable of reproducing within or on its host and spreading from one susceptible host to another.