

# Project Design Phase-1

## Proposed Solution Template

Date	14 October 2022
Team ID	PNT2022TMID42096
Project Name	Fertilizer Recommendation System For Disease Prediction
Maximum Marks	2 Marks

### Proposed Solution Template:

We want to know the better recommendation for fertilizers for plants with the disease.

S.No	Parameter	Description
1.	Problem statement (Problem to be solved)	To make an efficient use of Machine Learning Algorithm which reduces time and cost Farmer to detect the plant disease, its effect on crop yield and suggest the pesticides for plant disease.
2.	Idea/Solution description	Our research aims to solve the problem of detecting and preventing diseases of agricultural crops. To determine the optimal architecture for deep learning, we considered several models. As a source of the training data, we use the plant village open database for this approach automatic classifier Convolutional Neural Networks(CNN) model will be used for classification based on learning with some training samples. The developed model is deployed as a web Application which detect 15 types of diseases

		among plants viz. Tomato, Potato and Pepper.
3.	Novelty/Uniqueness	This web application can suggest good fertilizer for the disease in the plant by recognizing the image.
4.	Social Impact/Customer satisfaction	<p>1) To design such system that can detect crop disease and pest accurately.</p> <p>2) Create database of insecticides for respective pest and disease.</p> <p>3) To provide remedy for the disease that is detected.</p>
5.	Business Model (Revenue Model)	<p>1) Disease prediction in plant is a more important factor in farmer industry and it let to economic development.</p> <p>2) It is required for the growth of better quality good products.</p>
6.	Scalability of the Solution	Deep learning techniques are used to identify the disease and suggest the precaution that can be taken for those disease.