

**Project Design Phase-I**  
**Proposed Solution**  
**Template**

Date	7 NOVEMBER 2022
Team ID	PNT2022TMID22667
Project Name	Fertilizer Recommendation System For Disease Prediction.

**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)	Difficulty in identifying the disease of the crops at early stage and difficulty in analyzing suitable fertilizer which may leads to crop perish.
2.	Idea / Solution description	The proposed solution of this project uses Deep Learning algorithm to classify leaves, and identify the disease and suggest the fertilizers. The Deep learning solution includes the MobileNetV2 and VGG19 model for training. Based on the leaf disease detected, the model recommend fertilizer for prevention. The Farmers, Researches are the end users get benefited by this system.
3.	Novelty / Uniqueness	More accurate than others. The system is more robust incorporating more image dataset with wider variations. This system also estimates the probability of the infected plant
4.	Social Impact / Customer Satisfaction	Plant growth can be enhanced. Ensures plants are getting supplied with every nutrient they need. Multiple crops yields every season. It help support people's nutritional needs

5.	Business Model (Revenue Model)	Pay per user involves unlimited access of features while charging them only for service use. The product can charge fee to access the application for more than 5 information per day. Advertising plays an important role in revenue which include search engine and social marketing.
6.	Scalability of the Solution	It helps the farmers to pick the right fertilizer toward the start of the product cycle and amplify the yield. This system can be used by anyone in the world. Instantly gives the results