

TEAM ID: PNT2022TMID22667

FERTILIZER RECOMMENDATION SYSTEM FOR DISEASE PREDICTION

PROPOSED SOLUTION

- 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 Mobile NetV2 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.

NOVELTY

- More accurate than other models.
- The model is embedded in a website which is easy to use by the customers.
- This system is more robust by incorporating more image dataset with wider variations
- This system also estimates the probability of the infected plant.

FEASIBILITY

- Improves accuracy, generality and training efficiency
- Quick diagnosis of disease which is a significant part in early detection of disease.
- Farmers can easily interact with the portal through simple User Interface.
- Can reduce the cost which may occur due to wrongly used fertilizer.

SCALABILITY

- 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.

SOCIAL IMPACT

- 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.









The Business Model Canvas

Designed for:

Designed by:

Date:

Version:

Key Partners 	Key Activities 	Value Propositions 	Customer Relationships 	Customer Segments 
<ul style="list-style-type: none">✓ IT and Software✓ Distribution Channel	<ul style="list-style-type: none">✓ Leaf Disease detection✓ Fertilizer recommendation based on identified disease.	<ul style="list-style-type: none">✓ Easy to use.✓ Quick Response	<ul style="list-style-type: none">✓ Customer friendly user Interface✓ Time and Cost saving	<ul style="list-style-type: none">✓ Can be able to upload Image of the leaf.✓ Fertilizers are recommended in the portal
	Key Resources 		Channels 	
	<ul style="list-style-type: none">✓ Datasets from open source like Kaggle.✓ Deep learning model like VGG19 and MobileNetV2.		<ul style="list-style-type: none">Mobile AppVideos	
Cost Structure 				
<ul style="list-style-type: none">✓ Maintenance cost✓ Distributors				