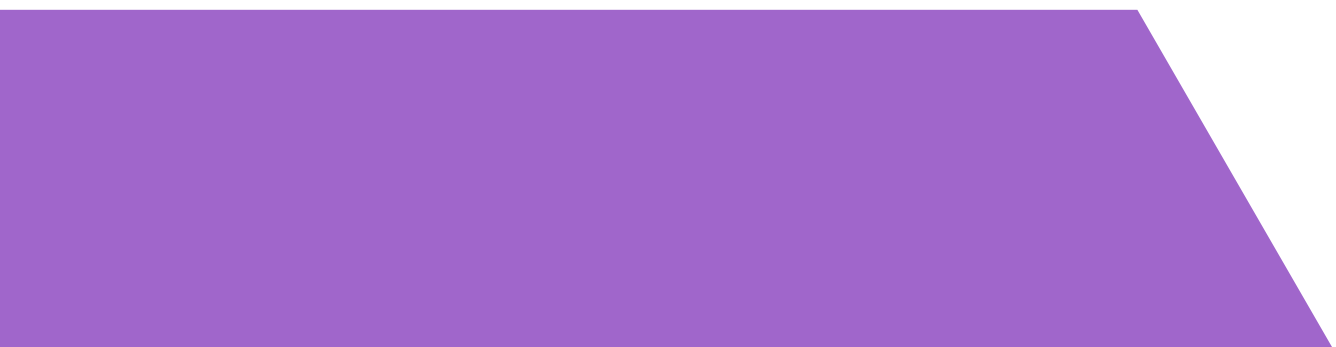



# FERTILIZER RECOMMENDATION SYSTEM FOR DISEASE PREDICTION


## 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 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.
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# 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.
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# 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.
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# 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.
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# 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.
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# The Business Model Canvas

Designed for:

Designed by:

Date:

Version:

<div>Key Partners</div> <div></div> <div><div>✓ IT and Software</div><div>✓ Distribution Channel</div></div>	<div>Key Activities</div> <div></div> <div><div>✓ Leaf Disease detection</div><div>✓ Fertilizer recommendation based on Identified disease.</div></div> <div>Key Resources</div> <div></div> <div><div>✓ Datasets from open source like Kaggle.</div><div>✓ Deep learning model like VGG19 and MobileNetV2.</div></div>	<div>Value Propositions</div> <div></div> <div><div>✓ Easy to use.</div><div>✓ Quick Response</div></div>	<div>Customer Relationships</div> <div></div> <div><div>✓ Customer friendly user Interface</div><div>✓ Time and Cost saving</div></div> <div>Channels</div> <div></div> <div><div>Mobile App</div><div>Videos</div></div>	<div>Customer Segments</div> <div></div> <div><div>✓ Can be able to upload Image of the leaf.</div><div>✓ Fertilizers are recommended in the portal</div></div>
<div>Cost Structure</div> <div></div> <div><div>✓ Maintenance cost</div><div>✓ Distributors</div></div>				