



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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Business model

<div><div>CUSTOMER SEGMENTS</div><div>1</div><div>Identify and determine the demographics and segmentation of your potential customers. Think about the cross section of customers who might need your product and which segment of customers you have the ability to reach.</div><div><div>Examples:</div><div>Home farmers</div><div>Researchers</div></div></div>	<div><div>VALUE PROPOSITIONS</div><div>2</div><div>Add sticky notes stating exactly why a customer would buy the product. What value do we plan to deliver (they buy)?</div><div><div>Examples:</div><div>urban planter</div><div>possibility to grow vegetables</div></div></div>	<div><div>CUSTOMER RELATIONSHIPS</div><div>3</div><div>List out all important customer relationships that are key to the business.</div><div><div>Examples:</div><div>growing recommendation</div><div>access to quality</div></div></div>	10
<div><div>KEY ACTIVITIES</div><div>4</div><div>What are the most critical activities your company must do for your business to succeed?</div><div><div>Examples:</div><div>App development</div><div>system maintenance</div></div></div>	<div><div>KEY PARTNERS</div><div>5</div><div>What key alliances and partnerships are important for the business to succeed?</div><div><div>Examples:</div><div>distribution channel</div><div>IT and software</div></div></div>	<div><div>KEY RESOURCES</div><div>6</div><div>What assets, materials, supplies, etc., must you acquire for your business to succeed?</div><div><div>Examples:</div><div>Logistic supplier</div><div>processor</div></div></div>	
<div><div>REVENUE STREAMS</div><div>7</div><div>Where will revenue come from? What sources?</div><div><div>Examples:</div><div>renewal contract</div><div>renewal growing streams</div></div></div>	<div><div>COST STRUCTURE</div><div>8</div><div>What are the variable and fixed business costs associated with operating the business successfully?</div><div><div>Examples:</div><div>IT infrastructure</div><div>distribution</div></div></div>	<div><div>CHANNELS</div><div>9</div><div>How will customers learn about our business and interact with our business? How will they receive our product?</div><div><div>Examples:</div><div>Mobile app</div><div>video</div></div></div>	