**FERTILIZER RECOMMENDATION
SYSTEM FOR DISEASE PREDICTION**

PROPOSED SOLUTION

- The proposed solution of this project uses Deep Learning algorithm toclassify leaves, and identify the disease and suggest the fertilizers.
- The Deep learning solution includes the MobileNetV2 and VGG19 model fortraining.
- Based on the leaf disease detected, the model recommend fertilizer forprevention.
- 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 widervariations.

- 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 cycleand 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

Key Partners 🔗

✔ IT and Software

✔ Distribution Channel

Key Activities ✔

✔ Leaf Disease detection

✔ Fertilizer recommendation based on identified disease.

Key Resources 🏭

✔ Datasets from open source like Kaggle.

✔ Deep learning model like VGG19 and MobileNetV2.

Value Propositions 🎁

✔ Easy to use.

✔ Quick Response

Customer Relationships ❤

✔ Customer friendly user Interface

✔ Time and Cost saving

Channels 🚚

Mobile App

Videos

Customer Segments 👥

✔ Can be able to upload image of the leaf.

✔ Fertilizers are recommended in the portal

Cost Structure 🏷

✔ Maintenance cost

✔ Distributers