



# Fertilizer Recomentation System for Disease Prediction

Agriculture is the most important sector in today's life. Most plants are affected by a wide variety of bacterial and fungal diseases. Diseases on plants placed a major constraint on the production and a major threat to food security. Hence early and accurate identification of plant diseases is essential to ensure high quantity and best quality. In recent years, the number of diseases on plants and the degree of harm caused has increased due to the variation in pathogen varieties, changes in cultivation methods, and inadequate plant protection techniques.

10 minutes to prepare  
1 hour to collaborate  
2-5 people recommended



**Before you collaborate**  
A little bit of preparation goes a long way with this session. Here's what you need to do to get going.  
10 minutes

- Team gathering**  
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.
- Set the goal**  
Think about the problem you'll be focusing on solving in the brainstorming session.
- Learn how to use the facilitation tools**  
Use the Facilitation Superpowers to run a happy and productive session.  
Open article



**Define your problem statement**  
What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

**PROBLEM**

1) In agricultural aspects, if the plant is affected by leaf disease, then it reduces the growth and productiveness. Generally, the plant diseases are caused by the abnormal physiological Functionalities of plants.

2) People who Grow Crops and facing Issues of Plant Disease .

3) The Traditional methods of Fertilizer prediction and Disease analysis are Expensive and takes a lot of time .

**Key rules of brainstorming**  
To ru an smooth and productive session

- Stay in topic.
- Encourage wild ideas.
- Defer judgment.
- Listen to others.
- Go for volume.
- If possible, be visual.



**Brainstorm**  
Write down any ideas that come to mind that address your problem statement.

10 minutes

**TIP**  
You can select a sticky note and hit the pencil icon to start drawing!

**Shyamkumar M**

- Website for Fertilizer recommendation
- Identify the disease
- Determining best fertilizer

**Sugumar T**

- Pre-trained model for image classification
- Build keras image classification model
- Making revolutionary changes in agriculture field
- It simplifies the farmers work
- Cost of using this application is less
- They can find the diseases at early stages

**William J**

- Deep learning based mathematical model for detecting diseases
- Early detection and management of problem
- Better utilization of available resources
- Interactive user interface to upload images
- Improves productivity
- Interactive user interface to upload images

**Sudharsanam**

- Fertilizer Recommendation
- Instant solution
- Useful to people with no prior knowledge
- Admin can view the recommended fertilizer through gmail
- It will save time
- Portal for farmers

**Shyamkumar**

- Useful to Farmers
- Recommends Fertilizers
- Utilizing of Resources
- Simple UI
- Reduces the Cost
- Improves profit



**Group ideas**  
Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

20 minutes

**Category 1**

- Website for Fertilizer recommendation
- Identify the disease
- Cost of using this application is less
- Pre-trained model for image classification
- Deep learning based mathematical model for detecting diseases
- Build keras image classification model
- Interactive user interface to upload images
- Useful to people with no prior knowledge
- Portal for farmers
- Interactive user interface to upload images
- Making revolutionary changes in agriculture field
- Early detection and management of problem

**Category 2**

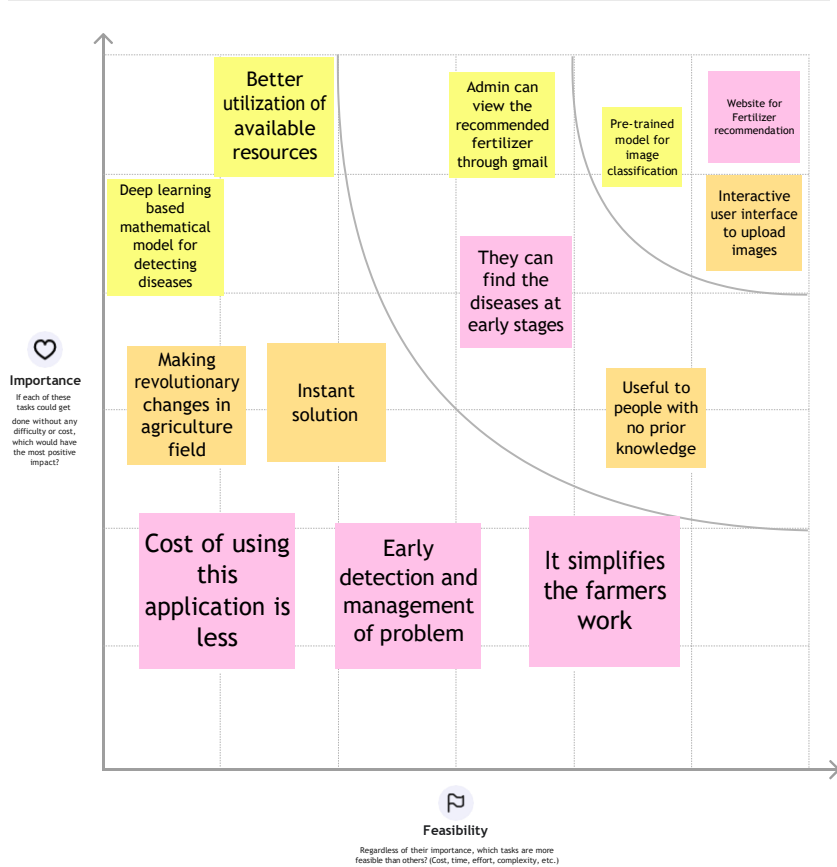
**Category 3**

- Instant solution
- Admin can view the recommended fertilizer through gmail
- Better utilization of available resources
- They can find the diseases at early stages
- Smart solution to solve the problem
- Cost of using this application is less



**Prioritize**  
Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

20 minutes



**After you collaborate**  
You can export the mural as an image or pdf to share with members of your company who might find it helpful.

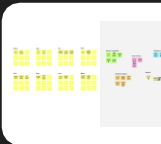
**Quick add-ons**

- Share the mural**  
Share a view link to the mural with stakeholders to keep them in the loop about the outcomes of the session.
- Export the mural**  
Export a copy of the mural as a PNG or PDF to attach to emails, include in slides, or save in your drive.

**Keep moving forward**

- Strategy blueprint**  
Define the components of a new idea or strategy.  
Open the template
- Customer experience journey map**  
Understand customer needs, motivations, and obstacles for an experience.  
Open the template
- Strengths, weaknesses, opportunities & threats**  
Identify strengths, weaknesses, opportunities, and threats (SWOT) to develop a plan.  
Open the template

Share template feedback



**Need some inspiration?**  
See a finished version of this template to kickstart your work.  
Open example

