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IDEATION PHASE
Brainstorm & Idea Prioritization

Date	19 September 2022
Team ID	PNT2022TMID33287
Project Name	Fertilizers Recommendation system for Disease Prediction
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization

Conceptualizing gives a free and open climate that supports everybody inside a group to partake in the imaginative reasoning cycle that prompts critical thinking. Focusing on volume over esteem, out-of-the-case thoughts are gladly received and based upon, and all members are urged to team up, helping each other foster a rich measure of clever fixes

Step-1: Team Gathering, Collaboration and Select the Problem Statement

Fertilizers recommendation for disease prediction

Agriculture is the main aspect of country development. Many people lead their life from the agriculture field, which is fully related to agricultural products. Plant disease, especially on leaves, is one of the major factors of reductions in both quality and quantity of the food crops. In agricultural aspects, if the plant is affected by leaf disease then it reduces the growth of the agricultural level. Finding the leaf disease is an important role of agriculture preservation. After preprocessing using a median filter, segmentation is done by Guided Active Contour method and finally, the leaf disease is identified by using Support Vector Machine. The disease-based similarity measure is used for fertilizer recommendation.

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

A   **Team gathering**
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B   **Set the goal**
Think about the problem you'll be focusing on solving in the brainstorming session.

C   **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.

5 minutes

PROBLEM

Can't find the disease on plants by using only the old practices, don't have much knowledge about the new variant of the crop diseases, poor quality and low quantity of the crop, don't know the correct proportion of fertilizers for the particular disease

Key rules of brainstorming
To run an smooth and productive session

Stay in topic.   Encourage wild ideas.

Defer judgment.   Listen to others.

Go for volume.   If possible, be visual.

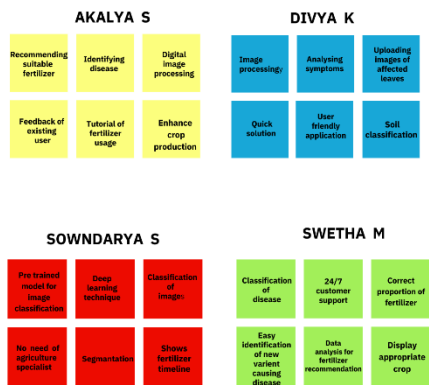# Step-2: Brainstorm, Idea Listing and Grouping

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 (switch to sketch) icon to start drawing!

AKALYA S

Recommending suitable fertilizer	Identifying disease	Digital image processing
Feedback of existing user	Tutorial of fertilizer usage	Enhance crop production

DIVYA K

Image processingy	Analysing symptoms	Uploading images of affected leaves
Quick solution	User friendly application	Soil classification

SOWNDARYA S

Pre trained model for Image classification	Deep learning technique	Classification of images
No need of agriculture specialist	Segmentation	Shows fertilizer timeline

SWETHA M

Classification of disease	24/7 customer support	Correct proportion of fertilizer
Easy identification of new varient causing disease	Data analysis for fertilizer recommendation	Display appropriate crop

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

Identification of plant disease

Recommend suitable fertilizers

Cost Efficient

Deep learning method for identification

Control plant disease

Step-3: Idea Prioritization

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**

Importance

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

- 24/7 customer support
- Pre trained model for image classificatio
- Uploading images of affected leaves
- Recommending suitable fertilizer
- Classification of images
- Image processing
- No need of agricultural specialist
- Classification of disease
- Analysing symptoms
- Image processing
- Data analysis for fertilizer recommendation
- Quick solution
- Correct proportion of fertilizer

Feasibility