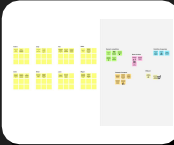# Ideation Phase

Date	06 Nov 2022
Team ID	PNT2022TMID09866
Project Name	Fertilizers Recommendation System For Disease Prediction
Maximum Marks	4 Marks

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 →

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1 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

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

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2 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!

Bharathkannan R

- Website for Fertilizer recommendation
- Identify the disease
- Determining best fertilizer
- User friendly website
- It reduces man power
- Smart solution to solve the problem

Balabaskaran

- 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

Pachaiappan

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

Gokul S

- 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

Jayaprakash

- 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

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3 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 can 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
- Interactive user interface to upload images
- Useful to people with no prior knowledge
- Portal for farmers

Category 2

- 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
- Making revolutionary changes in agriculture field
- Early detection and management of problem

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

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4 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?

Stickies on grid:
- Better utilization of available resources
- Admin can view the recommended fertilizer through gmail
- Pre-trained model for image classification
- Website for Fertilizer recommendation
- Deep learning based mathematical model for detecting diseases
- They can find the diseases at early stages
- Interactive user interface to upload images
- Making revolutionary changes in agriculture field
- Instant solution
- Useful to people with no prior knowledge
- Cost of using this application is less
- Early detection and management of problem
- It simplifies the farmers work

⚑ **Feasibility**
Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)

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 →