


V.S.B. ENGINEERING COLLEGE, KARUR
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
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Ideation Phase
Brainstorm & Idea Prioritization

Date	19 September 2022
Team ID	PNT2022TMID33383
Project Name	Fertilizers Recommendation System for Disease Prediction
Maximum Marks	4 Marks

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

Brainstorm



**FERTILIZER
RECOMMENDATION 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. Our project is proposed to build an automated system which is introduced to identify different diseases on plants by checking the symptoms shown on the leaves of the plant. Deep learning techniques are used to identify the diseases and suggest the precautions that can be taken for those diseases.

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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.

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.

1

Define your problem statement
Plant diseases are challenging to monitor manually as it requires a great deal of work, expertise on plant diseases, and excessive processing time. It is important to identify of crop condition, disease detection, prediction about specific crop and recommendation of fertilizer using deep learning techniques.

PROBLEM

The user needs a way to get relevant fertilizer based on the disease symptoms shown in the leaves. Protecting crops in organic farming is not an easy task. Plant diseases, especially on leaves, is one of the major factors of reductions in both quality and quantity of the food crops. Fertilizer Recommendation is not taken into consideration. So, it is necessary to develop crop yield prediction and fertilizer recommendation system which predicts crop yield and recommend fertilizer for selected crop based on different datasets like fertilizer data, location data and crop yield data. Finding the leaf disease is an important role of agriculture preservation. In our system, a special deep learning model has been developed based on the special architecture to detect plant diseases through plant leaves.

2

Key rules of brainstorming
To run a smooth and productive session

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Stay in topic.

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Encourage wild ideas.

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Defer judgment.

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Listen to others.

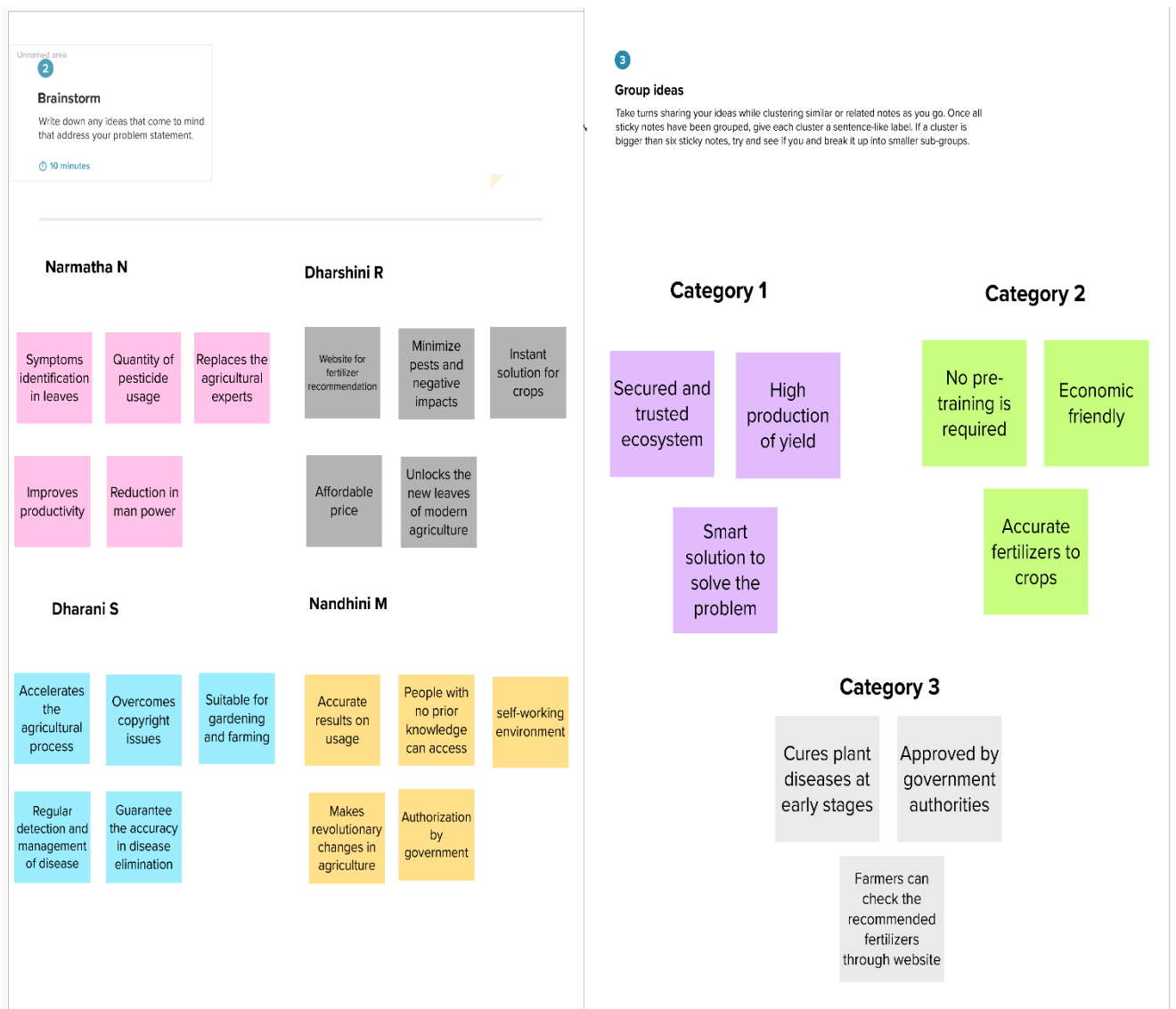
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Go for volume.

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If possible, be visual.

Step-2: Brainstorm, Idea Listing and Grouping



Step-3: Idea Prioritization

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.

