Ideation Phase

Brainstorm & Idea Prioritization Template

Date	19 September 2022
TeamID	PNT2022TMID04647
ProjectName	IoT Based Smart Crop Protection System for Agriculture
MaximumMarks	4Marks

Brainstorm & Idea Prioritization Template:

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

Template

Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

10 minutes to prepare
1 hour to collaborate
2-8 people recommended

Share template feedback

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.

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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

To protect the crops from the animals and birds which destroy the crop and also monitor the soil moisture levels in the field and temperature.

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

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!

3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, 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

HEMA

- Arduino and sensor based animals monitoring system
- Generate an alarm if any animals and birds detected
- Farmers can keep an eye on crop from anywhere
- Ultrasonic sensor to detect the gesture of the animals
- Less harm to animals and birds
- This system is capable to protect the farm in day and night with iot monitoring

KAMALI

- Build effective early warning system can safegaurd our crops from the animals
- By using electronic repellents we can safegaurd our crops in underground
- Check the soil moisture levels
- By using fences we can also protect our crops
- In night use of flash light tomthreaten the animals
- Also can use buzzer to scare the animals

KISHORE

- Using temperature sensor
- By using gsm module
- Alarm to frighten the birds and animals
- Cloud storage should be made effectively
- The whole system should be awter resistant
- Sensor signals helps the microcontroller to take action

MANIKANDAN

- Send a notification to farmer about the animal movement
- Remote monitoring
- Humidity can be measured using thermal humidity sensor
- Elimination of disturbance must be programmed correctly
- Every data should be stored in the database for future reference
- Final alert generation to farmer via sms, calls, alarm

- Motion sensor can be used to detect wild animals approaching near the field
- Smoke sensor can be detect the fire
- In such case the sensor can signal the microcontroller now sounds to take an action
- Microcontroller sounds an alarm to woo the animals away from the fields as well as sends SMS to the farmer
- If there is a smoke, it can immediately turns ON the motor
- This can ensure complete safety of crops from animals and from fire thus protecting the farmer's loss

Step-3: Idea Prioritization