IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE

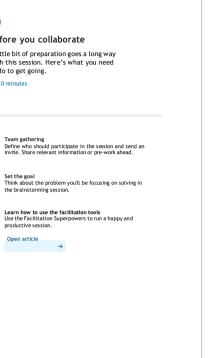## Brainstorm & idea prioritization

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

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.

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PNT2022TMID10536

Team Leader:
Satheesh

Team Members:
Selva Mahalakshmi,
Shaik Badulla Baba,
Shaik Fouzia Tasneem

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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

Crops on farms are frequently attacked by local animals such as buffaloes, cows, goats, birds, and so on. Farmers suffer massive losses as a result of this. Farmers cannot block entire fields or remain on the field 24 hours a day. As a result, we suggest an automated crop protection system from animals.

Key rules of brainstorming
To run a smooth and productive session

Stay in topic.   Encourage wild ideas.

Defer judgment.   Listen to others.

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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!

SATHEESH
- SENSORS TO DETECT ANIMAL MOVEMENT
- COST EFFICIENCY
- USED SOLAR PANEL TO CHARGE THE BATTERY
- MULTIPLE DATA ANALYSIS

SELVA MAHALAKSHMI
- MONITORING AND SURVEILLANCE
- MOBILE APPLICATION
- REAL TIME CROP MONITORING
- EFFECTIVE ACCURATION AND ADAPTIVE

BADULLA BABA
- ALARM TO SCARE THE SMALL PREDATORS LIKE BIRDS
- REDUCE THE ENVIRONMENTAL FOOTPRINTS
- USED SOLAR PANEL TO CHARGE THE BATTERY
- ALERT FENCING SYSTEM USING GSM

FOUZIA
- PRECESION FARMING
- HIGHLY FLEXIBLE AND MORE
- LOCAL DATA ACQUASATION
- REMOTE CONTROLLED

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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

UI DESIGN
- MOBILE APPLICATION
- WEBSITE ADD ON FEATURE

TECHNOLOGIES
- PRECESION FARMING
- GREEN HOUSE AUTOMATION
- MULTIPLE DATA ANALYSIS

TIP
Add customizable tags to sticky notes to make organization and filtering a breeze.

FEATURES
- HIGH PRODUCTIVITY
- MONITORING AND SURVEILLANCE
- QUICK RESULTS
- PESTICIDE CONTROL
- MACHINE LEARNING

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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

- QUICK RESULTS
- HIGH PRODUCTIVITY
- PRECESION FARMING
- PLANT HEALTH MONITORING
- CROP MANAGEMENT
- WEBSITE ADD ON FEATURE
- PESTICIDE CONTROL
- MACHINE LEARNING
- GREEN HOUSE AUTOMATION
- MULTIPLE DATA ANALYSIS
- MONITORING AND SURVEILLANCE
- MOBILE APPLICATION

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

TIP
Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can HSÍHJFHJ,fconfirm the spot by using the laserhe pointer holding tH key on the keyboard.