


Ideation Phase

Brainstorm & Idea Prioritization Template

Date	17 october 2022
Team ID	PNT2022TMID52158
Project Name	SmartFarmer - IoT Enabled Smart Farming Application
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization Template:

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



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

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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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

How might we [your problem statement]?



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

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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!

Benedit

The quick collection of data allows farmers to get insights fast and predict issues even before they happen

Smart farming use IoT and cellular wireless technologies for remote connectivity

Ground-based and aerial-based drones are being used in agriculture in order to enhance various agricultural

It reduce the amount of waste generated and minimize the damage to the environment

It enables growers and farmers to reduce waste and enhance productivity

PIR sensor is used in burglar system also to detect if thieves have entered into an infrastructure

Ganesh

Soil moisture sensors are used to detect the water content in the soil

It helps in maximizing operational efficiency and minimizing labor costs

Farmers could monitor and apply fertilizer and weed treatments only to required areas

Monitoring climatic condition allows predictive analytics to help you make better harvesting decisions

It involves accurate weather predictions along with real-time alerts

Less Consumption of Water and Energy

Sivanesh kumar

It triggers instant alerts about its health, condition, and temperature requirement, and displays all the details on the interconnected smart

The farmers can monitor the field conditions from anywhere

Reduced Operation Costs due to automated processes

Accurate soil data is one of the most valuable resources for farmers to grow quality crops

It will use technologies such as robots, temperature and moisture sensors, aerial images, and GPS technology

Temperature-humidity sensors are used to monitor the weather conditions in the fields

vignesh

Water Level sensors are used to detect the level of substances that can flow

Sensors help in mapping fields to understand their micro-scale in order to conserve resources such as water, fertilizer etc.

Farmers can able to identify the condition for their fields, and quickly identify pests or disease before it can damage their yield

Solar powered and mobile operated pumps save cost of electricity

It simplifies and automate the functioning of farmers

Low Usage of Chemicals and better food quality

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 can break it up into smaller sub-groups.

🕒 20 minutes

TIP

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

SENSORS

PIR sensor is used in burglar system also to detect if thieves have entered into an infrastructure

Soil moisture sensors are used to detect the water content in the soil

Temperature-humidity sensors are used to monitor the weather conditions in the fields

Water Level sensors are used to detect the level of substances that can flow

FUTURE SCOPE

Ground-based and aerial-based drones are being used in agriculture in order to enhance various agricultural practices

Monitoring climatic condition allows predictive analytics to help you make better harvesting decisions

It will use technologies such as robots, temperature and moisture sensors, aerial images, and GPS technology

Solar powered and mobile operated pumps save cost of electricity

PURPOSE

It enables growers and farmers to reduce waste and enhance productivity

It helps in maximizing operational efficiency and minimizing labor costs

The farmers can monitor the field conditions from anywhere

It simplifies and automate the functioning of farmers

DESIGN PROCESS

Smart farming use IoT and cellular wireless technologies for remote connectivity

It involves accurate weather predictions along with real-time alerts

It triggers instant alerts about its health, condition, and temperature requirement, and displays all the details on the interconnected smart gadgets

Sensors help in mapping fields to understand their micro-scale in order to conserve resources such as water, fertilizer etc

PROTECTION OF CROPS

The quick collection of data allows farmers to get insights fast and predict issues even before they happen

Farmers could monitor and apply fertilizer and weed treatments only to required areas

Accurate soil data is one of the most valuable resources for farmers to grow quality crops

Farmers can able to identify the condition for their fields, and quickly identify pests or disease before it can damage their yield

BENEFITS

It reduce the amount of waste generated and minimize the damage to the environment

Less Consumption of Water and Energy

Reduced Operation Costs due to automated processes

Low Usage of Chemicals and better food quality

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.

🕒 20 minutes



Reference:

<https://app.mural.co/t/benedit6671/m/benedit6671/1665671451272/f22cbb1ac2a980c8d7b70888bcaedc060bad7689?sender=u8ba67d986bd8333155cb2150>