

IOT BASED SMART FARMING

SUBMITTED BY

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BACHELOR OF ELECTRONIC AND COMMUNICATION ENGINEERING




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.

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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

To provide efficient decision support system using wireless sensor network which handle different activities of farm and gives useful information related to farm. In the case of traditional irrigation system water saving is not considered. Since, the water is irrigated directly in the land, plants under go high stress from variation in soil moisture, therefore plant appearance is reduced. The absence of automatic controlling of the system result in the improper water control system.



Key rules of brainstorming

To run a smooth and productive session



Stay in topic.



Encourage wild ideas.



Defer judgment.



Listen to others.



Go for volume.



If possible, be visual.

Brainstorm

Write down any ideas that come to mind that address your problem statement.

🕒 10 minutes

Faizul Hassan

- we insert the temperature sensor for temperature analysis
- Sensors for soil scanning and water, light and humidity and temperature management
- According to change in temperature level the sensor does its job
- It ensure proper water management for irrigation and in turn reduces water wastage

Manoj

- Due to automatically handling, user requires less man powe
- Determining custom fertilizer profiles based on soil chemistry.
- Excess water indication
- Controlled irrigation using efcient usage of inputs like water.

Gurumurugan

- we can use the ESP8266 IC board for Wifi connection
- we also insert the Automated irrigation
- Farmers can visualize production levels, soil moisture, and more in real time
- There are many ways that Smart Farming can improve sustainability

Kathir

- IoT in agriculture focuses on optimizing the use of land, energy, and water
- Minimizes Human efforts, simplifes techniques of farming and helps to gain smart farming
- There are many ways that Smart Farming can improve sustainability
- Due to automatically handling, user requires less man power

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

Sensors

Sensors for soil scanning and water, light and humidity and temperature management

These sensors collect vital information like crop health, temperature, precipitation, humidity, and other parameters

Irrigation

Controlled irrigation using efficient usage of inputs like water.

The system can automatically start the irrigation, which stops after achieving the specified threshold value of soil moisture

Farmer

Due to automatically handling, user requires less man power

Farmers can monitor field conditions from anywhere

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

