Research paper outline

Brainstorm and organize your ideas for an academic research paper

🕐 **30 minutes** to prepare
🖥 **30+ minutes** for the collaborative activity
👤 **2+ people** recommended

The purpose of the Research paper outline template is to provide a space for planning that you can revisit throughout the long process of writing an academic research paper or essay.

Use this as a place to get started and build a high level outline. Visually aggregate sources and notes, and brainstorm themes and arguments, and then make connections between the resources and arguments you are making. With the flexible nature of the mural canvas you can revisit the mural throughout your process to easily experiment with a different structure or leave notes for yourself.

Share the outline with your co-authors or reviewers early in the process so they can provide feedback and have insight into your process.

→ Before you start
A little bit of preparation goes a long way with this session

🕐 2 minutes

📄 **TOPIC**

SmartFarmer - IoT Enabled Smart Farming Application

📋 **TEAM ID**

PNT2022TMID09965

TEAM LEAD

GOKUL K

TEAM MEMBERS

AJMAL KHAN R

AKASHKUMAR K

ARFATH E
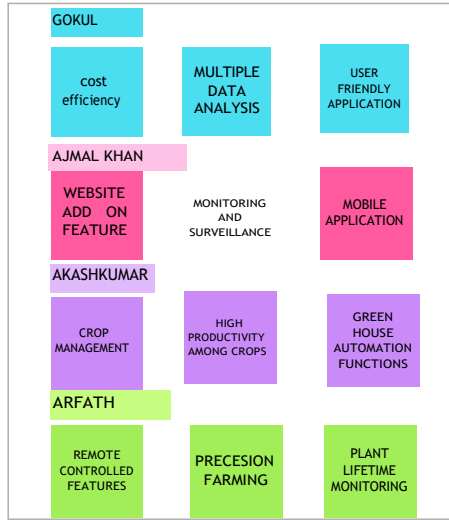
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1 Problem Statement

🕐 3 minutes

PROBLEM
Farmers suffer massive losses as a result of not predicting the weather conditions accordingly. Farmers cannot remain on the field 24 hours day. As a result,
we suggest an automated crop protection system
from animals

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2 Research brainstorm
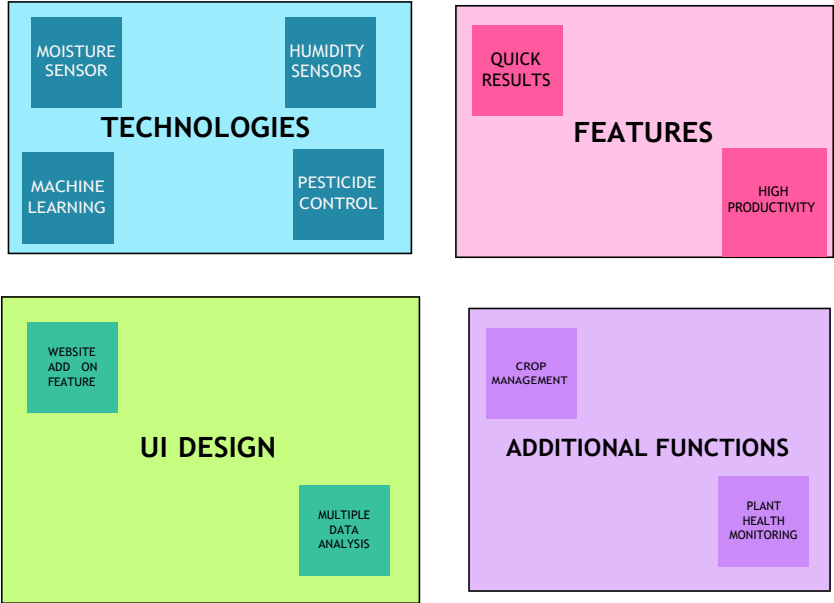Your initial thoughts to direct you to which resources to search for, tags, themes, other researchers in the field

🕐 2 minutes

GOKUL

- cost efficiency
- MULTIPLE DATA ANALYSIS
- USER FRIENDLY APPLICATION

AJMAL KHAN

- WEBSITE ADD ON FEATURE
- MONITORING AND SURVEILLANCE
- MOBILE APPLICATION

AKASHKUMAR

- CROP MANAGEMENT
- HIGH PRODUCTIVITY AMONG CROPS
- GREEN HOUSE AUTOMATION FUNCTIONS

ARFATH

- REMOTE CONTROLLED FEATURES
- PRECESION FARMING
- PLANT LIFETIME MONITORING

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3 Resources
Space to collect general resources - different mediums, podcast, articles, your documents

🕐 5 minutes

TECHNOLOGIES

- MOISTURE SENSOR
- HUMIDITY SENSORS
- MACHINE LEARNING
- PESTICIDE CONTROL

FEATURES

- QUICK RESULTS
- HIGH PRODUCTIVITY

UI DESIGN

- WEBSITE ADD ON FEATURE
- MULTIPLE DATA ANALYSIS

ADDITIONAL FUNCTIONS

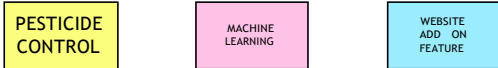- CROP MANAGEMENT
- PLANT HEALTH MONITORING

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4 High level themes
Brainstorm the themes & arguments you would like to make. Then bring over the applicable resources you will use as evidence

🕐 3 minutes

Themes

- PESTICIDE CONTROL
- MACHINE LEARNING
- WEBSITE ADD ON FEATURE

Arguments
Use this space to think of arguments for each theme you came up with!

- QUICK RESULTS
- PRECESION FARMING
- MONITORING AND SURVEILLANCE

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5 Visualize your outline
Organize your themes & evidence into a high level structure for your paper

🕐 15 minutes

Conclusion

This system also helps farmers to monitor the soil moisture levels in the field and also the temperature and humidity values near the field. The motors and sprinklers in the field can be controlled using the mobile application.