

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	19 September 2022
Team ID	PNT2022TMID06174
Project Name	Project - Emerging Methods for Early Detection of Forest Fires
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization Template:


Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

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.

Reference: <https://www.mural.co/templates/empathy-map-canvas>




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




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.

[Open article](#) →




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 implement a Forest Fire early detection 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.

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!

Vignesh S

- Can be implemented using Rule based color model
- Can be implemented using Python
- Develop a GUI software package
- Use openCV for image processing
- Can use matplotlib
- Using Flask library to develop the web Application

Ragu A

- Image processing and R-CNN model
- Use skimage for image processing
- Use more dataset to increase accuracy
- Use numpy for mathematical calculations
- Use of rule based Algorithm
- Use imutils along with openCV

Arun Kumar M

- Can be implemented using Java
- Conversion of RGB to YCbCr image
- Can use Matlab
- Use of Support Vector Machines to classify images
- Use VTK for image processing
- Can use satellite images

Vignesh Krishna Kumar V

- Tracking of fire using infrared cameras
- Use pandas for plots, graphs
- Use Dataset to compare images
- Using Django library to develop web Application
- Use MIA for image processing
- Can be implemented using C++

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Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, 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

Algorithms

- Conversion of RGB to YCbCr image
- Tracking of fire using infrared cameras
- Image processing and R-CNN model
- Using Rule based color model

Implementation Libraries

- Use openCV for image processing
- Use MIA for image processing
- Use skimage for image processing
- Use VTK for image processing

Final Application

- Develop a GUI software package

Implementation Language

- Can be implemented using Python
- Can be implemented using Java
- Can be implemented using C++

Web App Framework

- Using Flask library to develop the web Application
- Using Django library to develop web Application

Step-3: Idea Prioritization

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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

