

## Ideation Phase

### Brainstorm & Idea Prioritization Template

Date	19 September 2022
Team ID	592871
Project Name	Deep Learning Model For Eye Disease Prediction
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.

Reference: <https://shorturl.at/zBMWZ>

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



##### 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.

[Open article](#) →

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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 make a model capable of correctly predicting the eye disease one could have based on images only?



##### 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

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!

#### Jatin

Reading research and journal papers which relate to same or similar problems

Preprocess images to enhance features, normalize lighting conditions, and ensure a consistent format.

Start with a simple classification model and then incorporate neural network layers

#### Spriha

Focus on data cleaning is important, deeply studying augmentation and image pre processing techniques mandatory

Good understanding of theory behind the problem we are dealing with would help make better choices while designing a solution

Integrate explainability methods to understand how the model makes predictions.

#### Shaurya

Experiment with different learning rates, batch sizes, and optimization algorithms to fine-tune the model.

Use techniques like Grad-CAM to highlight regions in the image that contribute to the classification.

Choose a pre-existing CNN architecture (e.g., VGG, ResNet, Inception) or design a custom one.

#### Sarvesh

Going through legacy materials on internet like articles and papers which are relevant to our issue

Meticulous architecture of neural network layers feeding into each other to get the most probable classification

Proper division of work and planning integration to get the desired result

## Step-3: Idea Prioritization

### 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.

Reading research and journal papers which relate to same or similar problems

Image Prompt...

Going through legacy materials on internet like articles and papers which are relevant to our issue

Image Prompt...

Good understanding of theory behind the problem we are dealing with would help make better choices while designing a solution

Image Prompt...

Proper division of work and planning integration to get the desired result

Image Prompt...

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Image Prompt...

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Image Prompt...

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Image Prompt...

