

## Ideation Phase

## Brainstorm & Idea Prioritization Template

Date	13 September 2022
Team ID	PNT2022TMID36688
Project Name	Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy

### 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.

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

In this initial step all the team mates are gathered in the working platform of mural brainstorming. So the problem statement is understood previously in empathy map. Now brainstorming gives the feasible and ideal solutions that can be provided to avoid the disease. After gathering the members, each members are asked to propose a solution that they come across and give it's brief description at the upcoming slides.

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

#### 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

Diabetic Retinopathy (DR) is a common complication of diabetes mellitus, which causes lesions on the retina that affect vision. If it is not detected early, it can lead to blindness. Unfortunately, DR is not a reversible process, and treatment only sustains vision. DR early detection and treatment can significantly reduce the risk of vision loss.

#### PROBLEM

The manual diagnosis process of DR retina fundus images by ophthalmologists is time, effort and cost-consuming and prone to misdiagnosis unlike computer-aided diagnosis systems.

Transfer learning has become one of the most common techniques that has achieved better performance in many areas, especially in medical image analysis and classification.

#### 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.

🗨️ Share template feedback

## Step-2: Brainstorm, Idea Listing and Grouping

### 2 Brainstorm

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

10 minutes

**Jayasri. R**

Quit alcohol intake	Lowering blood sugar	Intake of oil in joints on low protein
Reduce over usage of pesticides	Intake of VEGF drugs	Drink enough water
Caplan diet reducing cholesterol	Not eating sugar sweets	Intake of phytonutrients

**M.Bharath**

Lifestyle changes	Stop eating eggs after	Avoid alcohol
Medicine, surgery and physical therapy	Manage diabetes with food changes	Avoid prolonged use of medicine
Get healthy very early on, gradually	Protein intake of 60g daily	Drinking water

**Kumar. C Sandhiya. B**

Reduce meat intake	Boost glucose control	Stop smoking
Wear contact lenses	Use phone regularly	Keep diet protein & high vitamins
Work on your cholesterol level	Take omega 3 fatty acids	Swimming, yoga, regular doctor

**Gajala. N**

Reduce eating processed foods	Get good sleep	Avoid stress
Use SE eye drops	Use eye medicine daily	Don't eat dairy products because of lactose
Get medicine for rheumatoid arthritis	Water use regularly	Drinking protein rich milk

### 3 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

#### Foods

- Intake of vitamins
- Omega-3 fatty acids
- Consume Bites
- Leafy vegetables
- Not eat meat, fish
- Cooked foods
- Drinking water
- Processed foods

#### Health

- Exercise
- Periodic checkups
- Use medicine after surgery
- Protein intake
- Take care of eyes
- Not eat glucose and sugar
- Manage stress and diabetes

#### Drugs

- Avoid smoking
- Avoid drinking
- Protein Bites
- Protein drink
- Protein diet

#### Insulin

- Protein intake
- Protein diet
- Protein diet
- Protein diet
- Protein diet

## Step-3: Idea Prioritization

