

## Ideation Phase

### Brainstorm & Idea Prioritization

Date	04 October 2022
Team ID	PNT2022TMID17913
Project Name	Classification Of Arrhythmia By Using Deep Learning With 2-D ECG Spectral Image Representation
Maximum Marks	4 Marks

### Brainstorm & Idea Prioritization:


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://app.mural.co/invitation/mural/nalaiyathiran6096/1664791286862?sender=u66c44aa6fb29a9e631df9322&key=f43142e3-f0e2-4b94-938a-a998d27b3fd6>

### 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

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➕

### 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](#)

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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 [your problem statement]?

Key rules of brainstorming

👤 Stay in topic.

💡 Encourage wild ideas.

👂 Defer judgment.

👂 Listen to others.

🗣️ Go for volume.

👁️ If possible, be visual.

To run a smooth and productive session

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

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

10 minutes

**TP**  
You can select a sticky note and hit the pencil button to directly edit it.

**Harihara Sudhan R**

- Understand types of heart disease
- explore different datasets
- study preprocessing technique
- Analyze the usability to doctor
- explore deployment processes
- can the accuracy be increased
- Understand the visualization techniques
- explore the working procedures of CNN
- deals with categorized for better understanding

**Santosh P**

- To find appropriate dataset and understand it
- Explore different use cases for solutions
- Identify the needs for the model and building it
- Train and evaluate the model for different cases
- Implement the model
- Check for increase in accuracy
- Visualize the process done by the model in user-friendly way
- Analyze other options and why
- Implement it for final results to show off in better way

**Ragul R. B**

- Understand the problem statement defined
- Understand the different types of applications
- Explore and find the suitable dataset
- Preprocess the dataset using suitable techniques
- Explore about CNN model
- Identify different layers that can be added
- Visualize the process done by the model in user-friendly way
- Explore about model building and deployment process

**Srivatsan S**

- Analyze the problem Statement
- Find the type of disease
- Analyze the category of disease
- Import the Suitable dataset
- To implement the Model
- To accuracy Ratio build the Model
- To check different ways to add layers
- Analyze the different case of layers
- To know the disease using identify the last case sample

**Somnath Babu N. R**

- Read the problem currently
- Understand the objectives well
- Download the suitable dataset
- Train the model
- Study the CNN model and get a good idea
- Identify the layers
- Form the layers to get good results
- Move towards model building
- Analyze the result and visualize it

**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.

30 minutes

**Working with Model**

- explore the working procedures of CNN
- Implement the model
- Explore about CNN model
- To implement the Model
- Train the model

**Dataset**

- explore different datasets
- To find appropriate dataset and understand it
- Import the Suitable dataset
- Visualize and find the suitable dataset
- Download the suitable dataset

**Visualization**

- Understand the visualization techniques
- Visualize the process done by the model in user-friendly way
- Analyze the result and visualize it

**Accuracy**

- can the accuracy be increased
- Check for increase in accuracy
- Visualize or increase the number of layers to achieve better accuracy
- Form the layers to get good results

## Step-3: Idea Prioritization

**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.

30 minutes

**Importance**  
If each of these ideas could get done, which would have the most positive impact?

**Feasibility**  
Regardless of their importance, which tasks are more feasible than others? Cost, time, effort, complexity, etc.