


Ideation Phase

Brainstorm & Idea Prioritization Template

Date	17 September 2022
Team ID	PNT2022TMID48069
Project Name	Classification of arrhythmia by using deep learning with 2-d ecg spectral image representation
Maximum Marks	4 Marks

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



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
 2-6 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**
Give 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

How might we [your problem statement]?

The electrocardiogram (ECG) is one of the most extensively employed signals used in the diagnosis and prediction of cardiovascular diseases (CVDs). The ECG signals can capture the heart's rhythmic irregularities, commonly known as arrhythmias. A careful study of ECG signals is crucial for precise diagnosis of patients' acute and chronic heart conditions. In this study, we propose a two-dimensional

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

TP You can select a sticky note and let the panel decide for about 1 hour to start sharing!

3 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

TP Add understandable steps to sticky notes to make it easier to find, follow, organize, and categorize important ideas as items within your model.

Muthamizhan

- The proposed CNN model
- ECG signals engineering training data manually used despite the performance
- It can also categorize according to risk levels

Bharathidasan

- Integrating different operations of machine learning (ML) techniques
- Detection of infarction by providing information using shallow CNN
- Each individual layer is followed by a pooling layer

VigneshKumar

- An irregular or abnormal heartbeat
- Pause in sinus rhythm
- Evaluating the signal tracing
- Based on Heart rate

Vetri selvan

- optimization parameters in the proposed D CNN model
- long term monitoring
- It is portable and patient use

What went well..

- Timeline
- collaboration
- suggestions
- Security

What didn't go well...

- Negative
- Fearless

Action..

- Achieve the task

Step-3: Idea Prioritization

4 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