

## Ideation Phase

### Brainstorm & Idea Prioritization Template

Date	19 September 2022
Team ID	PNT2022TMID53476
Project Name	Visualizing and Predicting Heart Diseases with an Interactive Dash Board
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

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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

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.

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1

**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**

Heart disease (HD) is a major cause of mortality in modern society. Medical diagnosis is an extremely important but complicated task that should be performed accurately and efficiently. Based on the analytics we can analyze which patients are most likely to suffer from heart disease in the near future and based on the patient details we will take decisions to cure them.

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

### Brainstorm 2

#### KEERTHANA V

Finding the optimal combination of hyperparameters	Choose the best model out of well-performing models can be simply reduced to visualizing model which offer the highest accuracy	Integrates other ML strategies such as time series, integration rules and other integration strategies.
Giving physical exercise advice to the patients	Track whether the patients are doing physical exercises or not.	

#### GAYATHRI S

Increase number of training data	Choose the best model by using all evaluation metrics like Precision, recall, F1 score	Based on prediction, Suggest healthcare advices
Reduce the time complexity of doctors by handling enormous amount of data	Avoid using figures that are not audience-specific, not measurable	The system can serve as a training tool for medical students

#### JAYASHRI P

Suggesting medicines for emergency	Predict the output with more number of visualizations	Diet controlled food for the people diagnosed with heart diseases.
Reminder for the patients to intake the medicines on time in their busy schedule.	Avoid creating complex dashboards with too many widgets, so it is easier	

#### KALAIARASI M.S

To spread awareness about the heart diseases symptoms.	If the risk of heart disease is high it will suggest the doctors	prediction based on modeling the correlations between compounded indicator factors
A dashboard should be customizable so you can structure your analysis results in a dynamic and interactive way		

### Group ideas 3

#### Improvement in Machine Learning

Finding the optimal combination of hyperparameters	Choose the best model out of well-performing models can be simply reduced to visualizing model which offer the highest accuracy	prediction based on modeling the correlations between compounded indicator factors	Increase number of training data	Predict the output with more number of visualizations	Integrates other ML strategies such as time series, integration rules and integration with other integration strategies.
Reduce the time complexity of doctors by handling enormous amount of data	Avoid using figures that are not audience-specific, not measurable	Choose the best model by using all evaluation metrics like Precision, recall, F1 score			

#### Improvement in Medical Usage

Giving physical exercise advice to the patients	Based on prediction, Suggest healthcare advices	If the risk of heart disease is high it will suggest the doctors	Track whether the patients are doing physical exercises or not.	Diet controlled food for the people diagnosed with heart diseases.
Suggesting medicines for emergency	Reminder for the patients to intake the medicines on time in their busy schedule.			

#### Additional Ideas

To spread awareness about the heart diseases symptoms.	Avoid creating complex dashboards with too many widgets, so it is easier	The system can serve as a training tool for medical students	A dashboard should be customizable so you can structure your analysis results in a dynamic and interactive way
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### Step-3: Idea Prioritization

#### Prioritize

4

