

## Ideation Phase

### Brainstorm & Idea Prioritization Template


Date	18 October 2023
Team ID	Team-592965
Project Name	Ship Classification
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.

#### Step-1: Team Gathering, Collaboration

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

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📌

**Team gathering**  
Paripalli Naga Venkata Prabhu Shobith  
C.Surya Kiran  
Kalla Bharath Vardhan  
Varanasi Sai Charan

📌

**Set the goal**  
Ship Classification using Deep Learning

📌

**Learn how to use the facilitation tools**  
Use the Facilitation Superpowers to run a happy and productive session.

Open article

➔

## Step-2: Select the Problem Statement,Brainstorm and Idea Listing

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

How might we create a Deep Learning model to classify ships in an ocean?



#### 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.

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!

#### Shobith

Image  
Compression  
Techniques

Data  
Balancing

Transfer  
Learning

Model  
Variants  
(CNNs,  
RNNs)

Fairness in  
Classifications

Learning  
Rate  
Scheduling

#### Bharath

Regularization  
Techniques

Active  
Learning

Hyperparameter  
Tuning

Learning  
Rate  
Scheduling

Cross-  
Validation

#### Sai Charan

Data  
Augmentation  
for Images

Visualize  
Activation  
Maps

Data Split  
Strategies

Model  
Visualization

Fusion of  
Multiple  
Models

#### Surya Kiran

Dataset  
Exploration

Model  
Pruning

Error  
Analysis

Model  
Explainability

Early  
Stopping

## Step-3: Grouping

3

### Group ideas

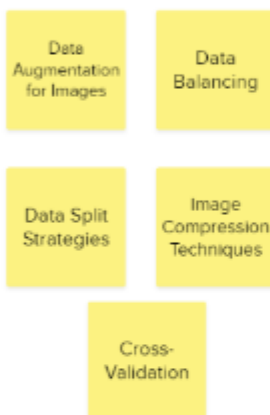
Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

🕒 20 minutes

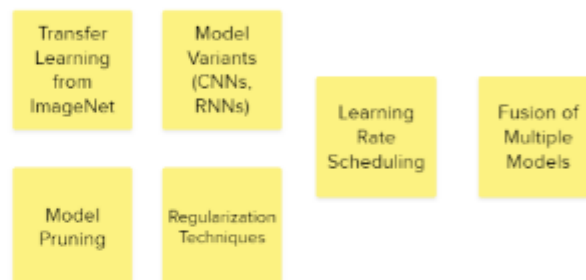
#### TIP

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

### Data and Preprocessing



### Model and Architecture

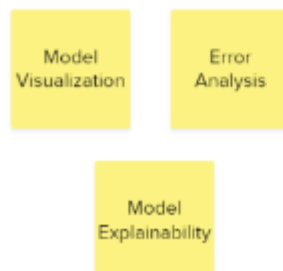


### Learning and Optimization

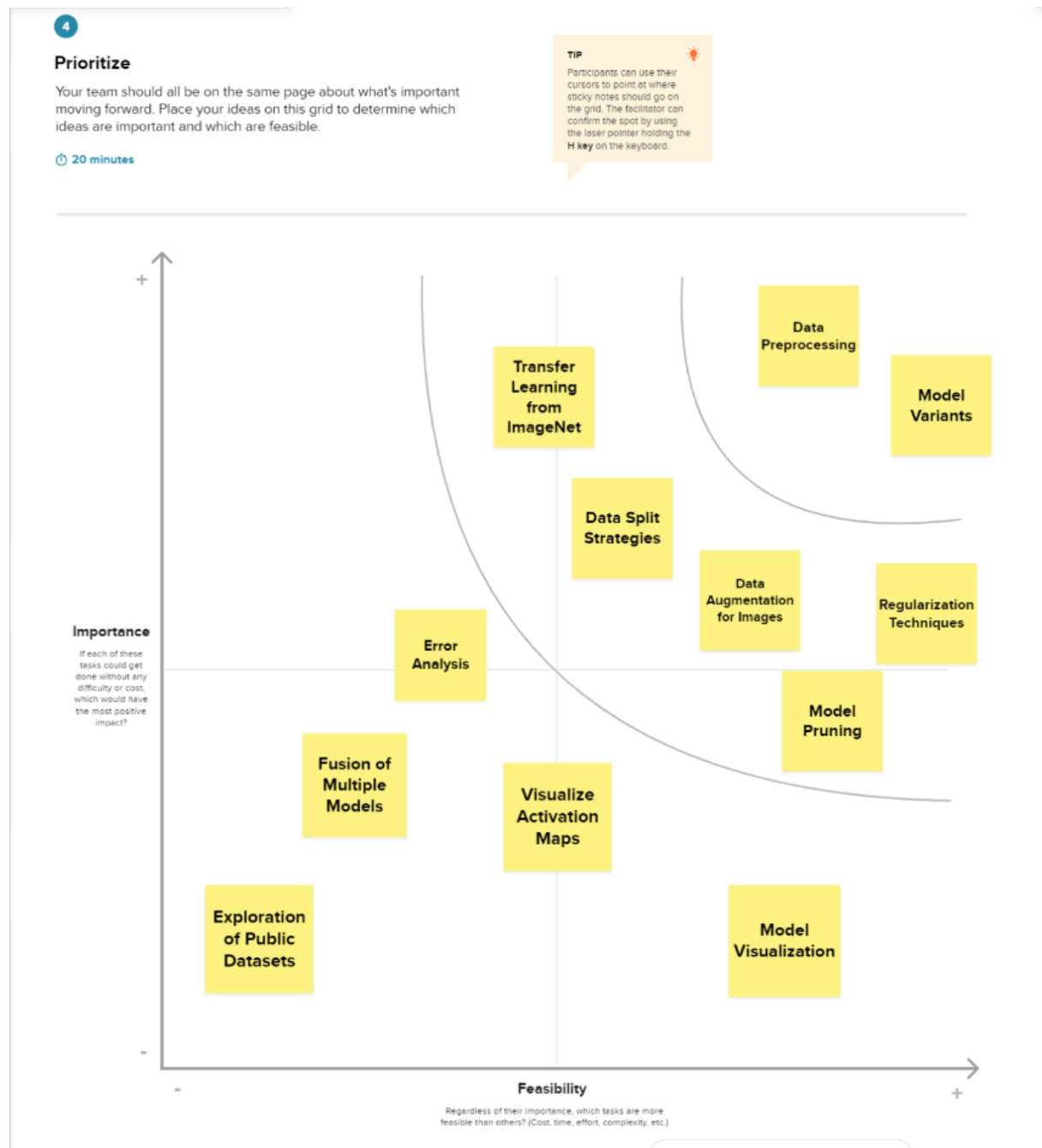
### Visualization and Interpretability



### Organization



## Step-4: Idea Prioritization



Link to our mural:

<https://app.mural.co/t/vitsmartinternz0250/m/vitsmartinternz0250/1697575753830/b7bb93c228ba0d12a42a1979c2e961e7ab908541?sender=u5e5d867d72b277d897990555>