

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	19 September 2022
Team ID	PNT2022TMID28601
Project Name	A Novel Method for Handwritten Digit Recognition System
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



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 →

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

Handwritten Digit Recognition with Neural Networks

PROBLEM

How might we provide a well effective novel digit recognition using neural networks?



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.

Step-2: Brainstorm, Idea Listing and Grouping

2 Brainstorm

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

🕒 10 minutes

Manosri.R

- Preprocessing and cleaning has to be done
- Remove noises to improve the accuracy
- A feature to provide various synonyms for the words recognized
- Make application real time

Sandhya.C

- To create application that detects handwriting
- Can recognize different handwriting text
- Validate and test with custom input
- A feature to export the recognized text

Pooja.S

- Can implement Fraud Detection
- Train the MNIST dataset
- Find the best model by experimenting with various models
- A feature to check the grammatical error of the recognized text

Sweadha.M

- To implement Agile methodology
- Solve complex jobs and make human life easier
- Use for pattern recognition applications
- To provide an accuracy of 99% and train a convolutional network to predict the digit given an image

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

Process

- To provide an accuracy of 99% and train a convolutional network to predict the digit given an image
- To implement Agile methodology
- Solve complex jobs and make human life easier
- Find the best model by experimenting with various models
- Remove noises to improve the accuracy

Features

- A feature to provide various synonyms for the words recognized
- A feature to export the recognized text
- A feature to check the grammatical error of the recognized text
- Can recognize different handwriting text

Technological Solutions

- Validate and test with custom input
- Train the MNIST dataset
- Preprocessing and cleaning has to be done
- Find the best model by experimenting with various models

Applications

- Use for pattern recognition applications
- Can implement Fraud Detection
- To create application that detects handwriting

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

Importance

📌 If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

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