

Ideation Phase


Brainstorm & Idea Prioritization

Date	20 September 2022
Team ID	PNT2022TMID30139
Project Name	A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization:




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.

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Define your problem statement

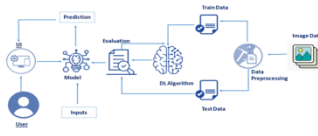
What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

 5 minutes

A Novel Method For Handwritten Digit Recognition System

Handwriting recognition is one of the compelling research works going on because every individual in this world has their own style of writing. It is the capability of the computer to identify and understand handwritten digits or characters automatically. Because of the progress in the field of science and technology, everything is being digitalized to reduce human effort. Hence, there comes a need for handwritten digit recognition in many real-time applications. MNIST data set is widely used for this recognition process and it has 70000 handwritten digits. We use Artificial neural networks to train these images and build a deep learning model. Web application is created where the user can upload an image of a handwritten digit. this image is analyzed by the model and the detected result is returned on to UI

Technical Architecture:



```
graph LR
    User((User)) --> Prediction
    Prediction --> Evaluation
    Evaluation --> Model[Model]
    Model --> Inputs[Inputs]
    Inputs --> Prediction
    Prediction --> TrainingData[Training Data]
    TrainingData --> ImageData[Image Data]
    ImageData --> DeepProgramming[Deep Programming]
    DeepProgramming --> TextData[Text Data]
    TextData --> Prediction
```

Step-2: Brainstorm, Idea Listing and Grouping

2

Brainstorm

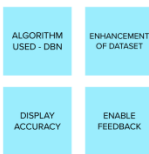
Write down any ideas that come to mind that address your problem statement.

🕒 10 minutes

TIP

You can select a sticky note and hit the pencil (switch to sketch) icon to start drawing!

JAYASHREE K



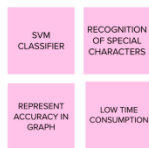
HARINI A



AKTCHAYAA A



DEEPIKA T



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 and break it up into smaller sub-groups.

🕒 20 minutes

ALGORITHM USED:



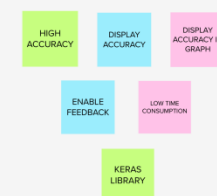
OUTPUT TYPE:



INPUT TYPE:



ADDITIONAL FEATURES:



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

