

Ideation Phase

Brainstorm & Idea Prioritization

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|---------------|---|
| Date | 12 October 2022 |
| Team ID | PNT2022TMID21878 |
| Project Name | A Novel Method for Handwritten Digit Recognition System |
| Maximum Marks | 4 Marks |

Brainstorm & Idea Prioritization:

A Novel Method for Handwritten Digit Recognition System

- Brainstorm
- Group Ideas
- Prioritize

Before you collaborate

1. **Brainstorm**

2. **Group Ideas**

3. **Prioritize**

Brainstorm

Brainstorming is a group process for generating creative ideas. It is a technique for generating ideas by brainstorming. It is a technique for generating ideas by brainstorming. It is a technique for generating ideas by brainstorming.

A Novel Method for Handwritten Digit Recognition System

The capacity of computer programs to read human handwritten digits is known as handwritten digit recognition. It is a difficult operation for the machine due to handwritten numbers are sometimes associated and can be associated in a variety of forms and sizes. Issue where a digit is placed inside and detected the digit that is associated in the image. Input: Conditional vectors is made up of the 10-digit binary over all the 10-MIST columns of selected inputs.

Group Ideas

Brainstorming is a group process for generating creative ideas. It is a technique for generating ideas by brainstorming. It is a technique for generating ideas by brainstorming. It is a technique for generating ideas by brainstorming.

Prioritize

Prioritization is a process of ranking ideas based on their importance and feasibility. It is a technique for generating ideas by brainstorming. It is a technique for generating ideas by brainstorming. It is a technique for generating ideas by brainstorming.

Brainstorming Ideas

Brainstorming is a group process for generating creative ideas. It is a technique for generating ideas by brainstorming. It is a technique for generating ideas by brainstorming. It is a technique for generating ideas by brainstorming.


Group Ideas

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Team Gathering, Collaboration and Select the Problem Statement



A Novel Method for Handwritten Digit Recognition System

🕒 10 minutes to prepare

🕒 1 hour to collaborate

👤 2-8 people recommended

[Share template feedback](#)

➕

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

A Novel Method for Handwritten Digit Recognition System

Problem Statement

🕒 5 minutes

The capacity of computer programmes to detect human handwritten digits is known as handwritten digit recognition. It is a difficult operation for the machine due to Handwritten numbers are not always accurate and can be produced in a variety of forms and sizes. Issue where a digit's picture is used and detects the digit that is present in the image. Neural Convolutional Network a model made with the PyTorch library over utilising the MNIST dataset to scribbled numbers

2

Brainstorm

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

10 minutes

Balasubramanian Kalyan

analyzing already existing solutions

collect wide range of hand writings as dataset

train model using pattern matching

document network is not available so that user can provide input is not available the handwritten digit

Binarization, Normalization and Training

Accurate recognition methods

train model using pattern matching

Recognized character

Balaji G

Collect local layer is the only leading block of a CNN

focus on non-optimal things

SVM classifier can be used

During the forward pass, when there is a network error

grabbing character into grid

Using feedback from the context, when a solution fails, change the

existing technology OCR cannot read handwriting

Gokul Aravind V

OCR is an already existing solution for reading text from images

Deep learning has been implemented in this paper

CNN works, some part of data that are represented as grid structures

Neurons in a single layer functioned completely independently

Training data set

OCR can be used to recognize

handwritten digit recognition using CNN

Ela Barath

find the drawback in existing solution

collect wide range of handwritings as dataset

consider accuracy is the main factor in choosing the algorithm

can solve using deep learning techniques

using 5 fold and 10 fold cross validation

perception & naive bayes classifier

it helps in identifying original documents from duplicate

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

Existing solution and Drawback

OCR is an already existing solution for reading text from images

Existing technology OCR cannot read handwriting

Techniques for Proposed solution

Also network and built a multi-class network to recognize the handwritten digits in the images

can solve using deep learning techniques

SVM classifier can be used

Handwritten digit recognition using CNN

KNR can be used to recognize

CRF works better to extract lower level features in phrases

Challenges

Collect wide range of handwritings as dataset

Consider accuracy as the major factor in choosing the appropriate

To achieve optimal solution

analyzing already existing solutions

train model using pattern matching

find the drawback in existing solution

collect the feedback from the users to address their challenges

focus on non-optimal things

accurate recognition methods

[illegible]