

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	19 September 2022
Team ID	PNT2022TMID21352
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

We have formed a team of four members namely Dhanya Prabha S B (Team Leader), Ramswetha N, Harshavarthini P and Nandhini S. We have chosen the domain of Artificial Intelligence. Artificial intelligence (AI) is intelligence demonstrated by machines, as opposed to the natural intelligence displayed by animals and humans. AI research has been defined as the field of study of intelligent agents, which refers to any system that perceives its environment and takes actions that maximize its chance of achieving its goals.

From the domain of Artificial Intelligence, we have selected the project – A novel method for handwritten digit recognition system.

Problem Statement:

Handwritten digit recognition is very important as it will be very helpful to reduce human effort. As each individual has different handwritings for representing digits, the system should have a capability to identify every handwriting with maximum accuracy. Such a system will be useful to reduce human interventions in identification, as everything is being digitized. The main objective of this work is to ensure effective and reliable approaches for recognition of handwritten digits and make banking operations easier and error free. Handwriting recognition has gained a lot of attention in the field of pattern recognition and machine learning due to its application in various fields. Various techniques have been proposed to for digit recognition in handwriting recognition system

Step-2: Brainstorm, Idea Listing and Grouping

Brainstorming:

The following are the ideas generated by our team members

Dhanya Prabha S B: Let's choose a topic related to AI domain and let's choose a project for handwritten digit recognition system. Let's do it for digits from 0 to 9.

Nandhini S: We can make it for the English alphabets, so that it will be easy for the users and it will eliminate the need of manpower.

Ramswetha N: Let's go for the digit recognition as it can be improved with newer technologies whereas there are lots of existing methodologies to identify alphabets.

Harshavarthini P: And in addition to that, we have to develop the digit recognition system with much reduced latency.

Idea Listing and Grouping:

- Handwritten digit recognition system
- Recognition system for English alphabets
- Improvising the digit recognition with newer technologies
- The digits should be recognised with zero latency

Step-3: Idea Prioritization

Finally, we decided to implement the handwritten digit recognition system using the Artificial Intelligence. The system must recognize with zero error and zero latency. The existing methodologies for the digit recognition should be improved to produce better results.