

## Ideation Phase

### Brainstorm & Idea Prioritization Template

Date	24 October 2022
Team ID	PNT2022TMID36983
Project Name	A Novel method for handwritten digit recognition System.
Maximum Marks	4 Marks

## BRAINSTROMING AND IDEA PRIORITIZATION PHASE.

**1 Define your problem statement**

Handwriting recognition system has the capability to identify and understand handwritten digits or characters automatically. The complexity in this project is to identify the handwriting of different styles. With application is implemented in 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.

**2 Brainstorm**

A model is created using artificial neural network and trained with different datasets and making the model to get 90% accuracy to recognize the digits

**3 Group ideas**

**Dataset collection**

- Numbers
- Alphabets
- Punctuation
- Operators
- Other integer characters
- Character of different colors

**Summarizing datasets**

- Identify dataset
- Organization of dataset
- Summarize to data points and labels
- Visualization of data
- Organization of data to train
- Organization of dataset to train
- Training and validation

**Steps to do:**

- Dataset preparation
- Prep dataset analysis
- Model selection
- Model training
- Model evaluation

**4 Prioritize**

30 minutes

Feasibility

Effort

Diagram of the project plan showing the relationship between Feasibility and Effort. The grid contains 27 ideas, with a curved line indicating the trade-off between the two. The ideas are:

- Digit in numbers
- Alphabets
- Punctuation
- Story creation
- Image recognition
- Image registration
- Image processing
- Image drawing
- Signature recognition
- Text
- Augmented reality
- Pattern extraction
- Decision algorithm
- Image filtering
- Validation
- Recognition
- Classifier
- Decision algorithm
- Dataset preparation & training
- User interaction
- Dataset collection
- Loading dataset
- UI Model
- API model
- Handwriting analysis
- Handwriting to text
- Handwriting to image
- Handwriting to audio
- Handwriting to video
- Handwriting to text
- Handwriting to image
- Handwriting to audio
- Handwriting to video