

## Project Design Phase-I Proposed Solution

Date	24 september 2022
Team ID	PNT2022TMID53383
Project Name	A Novel Method for Handwritten Digit Recognition System
Maximum Marks	2 Marks

### Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	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.
2.	Idea / Solution description	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 and using the tab we can also write the digit and can easily be recognized on the system.
3.	Novelty / Uniqueness	The user interacts with the UI (User Interface) to upload the image as input .The uploaded image is analyzed by the model which is integrated Once the model analyses the uploaded image, the prediction is showcased on the UI. The goal of our work is to create a model that will be able to recognize and classify the handwritten digits from images by using concepts of Convolution Neural Network.
4.	Social Impact / Customer Satisfaction	Handwritten Digit Recognition has various real-life time uses. It is used in the detection of vehicle number, banks for reading cheques, post offices for arranging letter, and many other tasks.
5.	Business Model (Revenue Model)	It is cost-efficient and also provides the best results.
6.	Scalability of the Solution	This model can be expanded to include more attributes for more accurate detection .Training the model with even more attributes will increase the efficiency further.