

**Project Design Phase-I
Proposed Solution Template**

Date	19 September 2022
Team ID	PNT2022TMIDxxxxxx
Project Name	Project - 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)	The problem statement aims at developing a novel handwritten recognition system using ML .The handwritten digit recognition system is a way to tackle the problem which uses the image of a digit and recognizes the digit present in the image .
2.	Idea / Solution description	To solve this problem, we are going to implement a classification algorithm to recognize the handwritten digits. This algorithm will be effective in order to recognize digits which are of different compositions
3.	Novelty / Uniqueness	1.Strategy for perceiving and arranging transcribed digits. 2. Can be used offline λ Provided more data sets for more accuracy 3. The uniqueness and assortment in the composition styles of various individuals additionally influence the example and presence of the digits.
4.	Social Impact / Customer Satisfaction	Handwritten digits can be recognized easily without any strenuous efforts. This reduces time and improves productivity for people.
5.	Business Model (Revenue Model)	This novel method for Handwritten Digit Recognition System can be approached by many industries which needs this application including, programmed bank checks, postal locations and tax documents and so on. Humans recognizing the handwritten digits with their naked eye can be difficult at times as it of different sizes, thickness, direction and ca also lead to making errors due to these factors. This is when our proposed solutions comesinto help. We provide different data sets which helps in recognition with accuracy, so that human making errors can be avoided respectively.

6.	Scalability of the Solution	<p>1. Financial and other business organizations such as banks are facing issues in Recognizing written digits such as in cheques etc. This can be handled by our handwritten digit recognition project as they expand into different business domains without impacting performance. Our proposed solution is scalable as it is dynamic and also trained using AI and deep learning Models.</p> <p>2. There is no limit in the number of digits that can be recognized.</p>
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