

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

Date	28 October 2022
Team ID	PNT2022TMID43734
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)	Because everyone in the world has a unique writing style, handwriting identification is one of the fascinating research projects now being conducted. It is the ability of a computer to automatically recognise and comprehend handwritten numbers or letters. Every aspect of life is being digitalized to lessen the need for human labour as a result of advancements in science and technology. Consequently, handwritten digit recognition is required in many real-time applications.
2.	Idea / Solution description	The MNIST data collection, which contains 70000 handwritten digits, is frequently utilised for this recognition method. In order to train these photos and create a deep learning model, we use artificial neural networks. A web application is developed that allows users to upload pictures of handwritten numbers. the model analyses this image and sends the discovered outcome back to the user interface.
3.	Novelty / Uniqueness	The physically challenged individuals will hear the digit that will be displayed on the screen (Blind and Deaf).
4.	Social Impact / Customer Satisfaction	Every person has an own writing style. With the use of this application, everyone can see clearly what others are writing by hand. Like, the patient will understand the doctor's handwriting. Teachers will be able to read the handwriting of their students.
5.	Business Model (Revenue Model)	1. The patient will be able to read the doctor's handwriting. 2. Teachers will be able to read the handwriting of their students. 3. Cashiers in banks can read customers' handwriting

6.	Scalability of the Solution	One file at a time can be processed by the application.
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