

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

Date	19 September 2022
Team ID	PNT2022TMID18129
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)	Because handwritten digits are imperfect and can be generated in a variety of sizes, forms, and shapes, it is a challenging work for the machine.
2.	Idea / Solution description	The CNN model, which is used to locate the digits or expression in digital form, is trained using an image dataset of numbers and symbols of various styles and forms.
3.	Novelty / Uniqueness	Recognises symbols, can differentiate between known and unknown characters, and can work out mathematical formulas
4.	Social Impact / Customer Satisfaction	This model used in real-time works fast, accurate and reduces human efforts, thus will have a good social impact and customer satisfaction.
5.	Business Model (Revenue Model)	The project can be integrated and used with people who are in the roles like postal mail sorting, bank check processing, data entry, fee payment, traffic rules management etc.
6.	Scalability of the Solution	Using cloud-native techniques is one of the applications to make handwritten digit recognition scalable. IBM cloud is one of the cloud-based AI scalability options. An application can effectively handle a vast volume of data and a big number of concurrent users.