

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID13012
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 the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Detect the scanned images of handwritten digits.
2.	Idea / Solution description	<ul style="list-style-type: none">● Dataset - MNIST● CNN - vgg16 cnn● Optimiser - S-GD Using MNIST dataset and vgg16 CNN, we recognise the handwritten digits and optimise the solution.
3.	Novelty / Uniqueness	To achieve a highly reliable and accurate model through hyperparameter tuning and various model optimization techniques
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none">● Editable● Easy translation● Easy to scan and recognise digits● Easy to use and understand● Easy to calculate● Supports multiple languages
5.	Business Model (Revenue Model)	<ul style="list-style-type: none">● Data analytics● Statistics● Future prediction● Data entry
6.	Scalability of the Solution	The model is scalable from a dataset training perspective. We can train huge amounts of Hand-written image data by converting them into .npy file format which would facilitate easy storing, retrieving and processing.