Project Design Phase – I

Proposed Solution

Team ID	PNT2022TMID27693
Project Name	A Novel Method for Handwritten Digit Recognition System

Proposed Solution:

S.No	Parameter	Description
1.	Problem Statement (Problem to be solved)	A Novel Method for Handwritten Digit Recognition System
2.	Solution description	With the help of CNN based model we classify digits which is in handwritten format and this model can be trained by using MNIST database which contains 60,000training samples and 10,000 test samples. By doing so we propose solution to the given Problem.
3.	Novelty	Using CNN we classify the image datasets, compared to other methods CNN provides an efficient solution. Here use of ANN algorithm is advisable for voice recognition which helps blind people.
4.	Customer Satisfaction	Use of external dependencies or devices to recognize the digits is not required here. Users can use their mobile phones for this process.
5.	Business Model (Revenue Model)	• Input module • Image processing module • Feature extraction module • Data set training module • Analysis module

6.	Scalability of the Solution	An accuracy of 99.98%, and 99.40% is obtained for the result of the training dataset with 50% noise by using MNIST. We can even improve this model to achieve the better results by training different types of datasets