**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 22 October 2022 |
| Team ID | PNT2022TMID28883 |
| Project Name | A novel method for handwritten digit recognition |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

Project team shall fill the following information in the proposed solution template.

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| **S.No.** | **Parameter** | **Description** |
|  | 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 . |
|  | Idea / Solution description | Developing an AI predictive model to predict the handwritten digits and to construct a neural network with hidden layers and train to detect the digits. |
|  | Novelty / Uniqueness | The system not only produces a classification of the digit but also a rich description of the instantiation parameters which can yield information such as the writing style |
|  | Social Impact / Customer Satisfaction | Handwritten digits can be recognized easily without any strenuous efforts. This reduces time and improves productivity for people. |
|  | Business Model (Revenue Model) | It is used in thedetection of vehicle numbers, banks for reading cheques, post offices for arranging letters, and many other tasks. |
|  | Scalability of the Solution | To attain higher performances in the domain of character recognition and pattern recognition ,due to its excellent feature extraction and working as best classifier characteristics.  There is no limit in the number of digits that can be recognized. |