

Project Design Phase-I
Proposed Solution Template

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| Date | 29 September 2022 |
| Team ID | PNT2022TMID37128 |
| 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) | The issue is there is a wide range of handwriting - Good and Bad which makes difficult for the users to recognize them. It is a hard task for the machine because handwritten digits are not perfect and can be made with many different shapes and sizes. |
| 2. | Idea / Solution description | 1. It is the capability of a computer to fete the mortal handwritten integers from different sources like images, papers, touch defenses. 2. It allows user to translate all those signature and notes into electronic words in a text document format and this data only requires far less physical space than the storage of the physical copies. |
| 3. | Novelty / Uniqueness | Accurately recognize the digits rather than recognizing all the characters like OCR. |
| 4. | Social Impact / Customer Satisfaction | Handwritten digits can be recognized easily without any strenuous efforts. This reduces time and improves productivity for people. |
| 5. | Business Model (Revenue Model) | It is used in the detection of vehicle numbers, banks for reading cheques, post offices for arranging letters, and many other tasks. |
| 6. | 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. |

