**Project Design Phase-I**
**Solution Architecture**

| Date | 15 October 2022 |
|---|---|
| Team ID | PNT2022TMID28533 |
| Project Name | Project - A Novel Method for Handwritten Digit Recognition System |
| Maximum Marks | 4 Marks |

## Solution Architecture:

Character recognition plays an important role in the modern world. It can solve more complex problems and makes humans' job easier. An example is handwritten character recognition. This is a system widely used in the world to recognize zip code or postal code for mail sorting. There are different techniques that can be used to recognize handwritten characters. Two techniques researched in this paper are Pattern Recognition and Artificial Neural Network (ANN). Both techniques are defined and different methods for each technique is also discussed. Bayesian Decision theory, Nearest Neighbor rule, and Linear Classification or Discrimination is types of methods for Pattern Recognition. Shape recognition, Chinese Character and Handwritten Digit recognition uses Neural Network to recognize them. Neural
Network is used to train and identify written digits. After training and testing, the accuracy rate reached 99%.This accuracy rate is very high

## Example - Solution Architecture Diagram: