

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	2 November 2022
Team ID	PNT2022TMID28666
Project Name	Project - A Novel Method For Handwritten Digit Recognition System.
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution

FR No.	Functional Requirement(Epic)	Sub Requirement(Story/Sub-Task)
1	Input correlation	Correlation is digital image that combines image registration and tracking methods for accurate 2D measurements of changes and recognize the characters from the given images
2	Data Preparation	It is a process preparing raw data is whether that is suitable for further processing and analysis
3	Character Classification	In this phase, the attributes of the data in picture are compared to the classes in database is actually it determines in that class of the picture is belongs to
4	Feature Classification	It refers to the process of transforming raw data in to numerical features that can be processed while preserving in information in the original data set

Non-functional Requirements:

Following are the non -functional requirements of the proposed solution

FR No.	Non-Functional Requirement	Description
1	Security	The applications of hand written digit recognition can be used in banking sector where it can be used to maintain the security pin numbers safely
2	Usability	It is one of the major important issues in pattern recognition applications. Some of the application of digit recognition and it also include data entry forms, Banks check processing etc.,
3	Reliability	It indicates the probability that the system will perform its intended function for a large period of sufficient time and it also operate in a secured environment
4	Performance	The standard implementatios of neural networks achieve an accuracy of approximately(98-99)
5	Availability	Actually, The features for hand written digit recognition have been acquainted. These features are based on analysis of the digit image And extract slant or slope information.
6	Scalability	The scalability in the task of handwritten digit recognition , using a classifier , has great performance and it makes use of online handwriting recognition on computer tablets ,recognizing zip codes on mail for postal mail sorting ,processing bank check amounts, numeric entries in forms filled up manually . For example -tax forms And so on.