

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

Date	03 October 2022
Team ID	PNT2022TMID22043
Project Name	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)
FR-1	Home page	Description of the Handwritten Digit Recognition.
FR-2	Upload image	Upload the image and get the result.
FR-3	Prediction	<ul style="list-style-type: none">• The model gets the image of the Handwritten digits and recognizes the Handwritten digits.• CNN algorithm is used over the MNIST dataset to recognize the Handwritten digits.• After recognition it will result the digit of the Handwritten digit.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Users should be able to understand and use the system easily. In addition, it ought to be simple for users of all skill levels to navigate.
NFR-2	Security	The system should automatically be able to authenticate all users with their unique username and password
NFR-3	Reliability	The samples are used by the neural network to automatically deduce rules for reading handwritten digits. Furthermore, the network may learn more about handwriting and hence enhance its accuracy by increasing the quantity of training instances.
NFR-4	Performance	The delay in providing the information when hundreds of requests are given should be minimum
NFR-5	Availability	Available for every users like Banks, Post Office, Library, etc.
NFR-6	Scalability	Model is predicted to have accuracy of 95% and has opportunity of extending the model to recognize text.