

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

Date	20 October 2022
Team ID	PNT2022TMID49347
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	The product essentially converts handwritten digits to digital form.	The user is first asked to draw a number on the canvas and the model that is built is then utilized to compare the data to provide an output in digitized form.
FR-2	Recognizing the handwritten digit and displaying.	Recognizing the handwritten digit and displaying
FR-3	Import the dataset file directly to the program from a command that will download the dataset from its website.save the dataset file in the same the directory as the program.	Installing packages and applications.
FR-4	Build a neural network with a number of nodes in the input layer equal to the number of pixels in the arrays.	Nil.
FR-5	Activating the neural network.	Packages -tensorflow.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	System design should be easily understood and user friendly to users. Furthermore, users of all skill levels should be able to navigate it without problems.
NFR-2	Security	The system should automatically be able to authenticate all users with their unique username and password.
NFR-3	Reliability	It should be user-friendly.
NFR-4	Performance	Should reduce the delay in information when hundreds of requests are given.
NFR-5	Availability	Information is restricted to each user's limited access.
NFR-6	Scalability	The system should be able to handle 5000 users accessing the site at the same time.